DOCUMENT RESUME

ED 183 892 CE 024 514

AUTHOR Omvig, Clayton P.
TITLE The Bowling Green, Kentucky, K-12 Career Education Incremental Improvement Project. Evaluation Report.
INSTITUTION Kentucky Univ., Lexington. Coll. of Education.
SPONS AGENCY Office of Career Education (DHEW/OE), Washington, D.C.
PUB DATE Sep 79
GRANT G0078C0018
NOTE 149p.; For related documents see ED 163 226 and ED 167 775. Small print in figures will not reproduce well.

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Academic Achievement; Administrator Attitudes; *Attitude Measures; Career Choice; Career Development; *Career Education; Counselor Attitudes; Counselor Role; Grade 7; Grade 9; Grade 11; *Improvement Programs; Principals; *Program Effectiveness; Program Evaluation; Student Attitudes; *Student Evaluation; Surveys; Teacher Attitudes; Teacher Participation; *Vocational Maturity
IDENTIFIERS Education Amendments 1974; Kentucky (Bowling Green)

ABSTRACT

The evaluation of the Bowling Green, Kentucky, K-12 Career Education Incremental Improvement Project consisted of five components: professional staff survey (PSS), student career maturity, career education program assessment, record of student career development, and academic achievement. PSS findings indicated that the seventy principals, counselors, and teachers surveyed generally (1) had positive attitudes toward the importance of career education activities, their involvement, and career of career education activities, their involvement, and career education in general and (2) rated their programs as effective. The Career Maturity Inventory (CMI) was administered to control and career education groups of students in grades 7, 9, and 11. The career education group displayed higher levels of career maturity, particularly at grades 7 and 9. Career education group scores also exceeded CMI norms. Findings of the Program Assessment indicated that grade 12 students felt the need for more career-related experiences and activities, especially in the area of school-to-work transition. The Academic Achievement and Record of Student Career Development components used existing student records. Achievement test scores below the norm at the start of the program improved and were at or above the norms in later grades. Students' tentative career choices over a period of eight years showed less variation. (Some evaluation instruments are appended.) (YLB)

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EVALUATION REPORT

The Bowling Green, Kentucky, K-12 Career Education Incremental Improvement Project

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September, 1979

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ACKNOWLEDGEMENTS

The assistance of several people was necessary for the successful completion of this research effort.

First, thanks are extended to Mrs. Judy White, Director of the Career Education Project and Coordinator of Career Education in Bowling Green City Schools. She provided invaluable assistance in securing student and staff data required for the evaluation effort. Thanks are also extended to the counselors and homeroom teachers who gave of their time to administer instruments to students.

Of particular value to this project were the efforts of two primary consultants and the project assistant: Mr. Tim Frankenburger and Mr. Frank Gohs for their statistical/computer assistance and Charlotte Tulloch for her input into the preparation and editing of the Final Report.

Special appreciation is reserved for Mrs. Anne Mills, project secretary and typist.

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CHAPTER 1

INTRODUCTION

The previous sections of this report described the Bowling Green, Kentucky Career Education Project. Provided in this Appendix is the evaluation report associated with the FY 1979 program operation.

Since this document is an appendix to the Project Final Report, background data and a description of the project will not be repeated. For these data, the reader is directed to the body of the final report itself. In addition to the FY 1979 Final Report, information is also available from previous reports and other project documents, since Bowling Green has been involved in career education for eight years. The survival of this school's program through various forms of local, state and federal funding sources makes it one of the national demonstration programs from which both procedures and curriculum can be gained. In this regard, the project has served as a State Demonstration/ Visitation Site for Career Education, with information packets, orientation, and on-site visits being provided on request.

Evaluations of previous years have revealed considerable program success. Career education has become the organizing concept around which many of the other educational activities revolve. As will be described in the findings section of this report, principals, counselors, and teachers alike unanimously agree that the concept of career education has been accepted and is being actively implemented in the various schools in the Bowling Green City System. Most teachers in the system have been with the school for a number of years and have logged numerous hours of inservice training in career education. As such, most teachers feel that they personally have a good understanding of career education and its goals, and feel that they are adequately prepared for continued implementation.

The following sections of this report outline the procedures, findings, and recommendations resulting from an evaluation conducted to ascertain project outcomes and status at the completion of the FY 1979 program year.

Objectives

The overall objective of this evaluation was to determine the effectiveness of the school's career education program through analysis of student measures and by ascertaining the perceptions of professional staff and teachers concerning program needs and accomplishments. Additionally, these perceptions were compared, when appropriate, to the findings of the 1978 evaluation report as prepared by the NTS Research Corporation, Durham, North Carolina . (Feifs, 1978)

More specifically, the 1979 evaluation objectives were:

1. To ascertain perceptions of professional staff regarding the status of career education implementation.
2. To identify the frequency with which the staff members participate in career education activities, including their perceptions of the adequacy of the identified level and the importance they place on the activity.
3. To ascertain teacher opinions regarding career education and its effects on students.
4. To identify differences in response to 1, 2, and 3 above which could be attributable to position or level of responsibility.
5. To obtain measures on student career maturity, and compare these measures to a non-career education group of students and to established norms (Grades 7, 9, 11).
6. To ascertain the perceptions of 12th grade students regarding their assessment of current career education activities and future program needs.

7. To evaluate the Career Development Student Record.
8. To identify trends in student achievement over the period during which the career education program has been in operation.

Evaluation Components

The above objectives will be reported and discussed in five major project components. These components are as follows:

1. Professional Staff Survey -

   Included in this component are the results obtained from a sample of staff members regarding their perceptions of career education implementation in Bowling Green, including the frequency with which they participate in various career education activities, how frequently they feel they should be involved, and the importance they place on that activity. Also included are their responses to selected opinion statements regarding career education and its effects on students.

2. Student Career Maturity -

   This component of the evaluation consists of a measure of Career Maturity for seventh, ninth, and eleventh grade students, as measured by the Career Maturity Inventory (see Procedures Section). Measures from Bowling Green were compared with a non-career education control group and with established CMI norms.

3. Career Education Program Assessment (Grade 12) -

   Twelfth grade students were queried relative to their involvement in career education activities and their opinion of the effectiveness of those activities. Also included are their opinions regarding program needs.

4. Record of Student Career Development -

   For the past seven years, students in Bowling Green have been asked annually to list a tentative career choice. These choices have been recorded on a student record. This component of the evaluation will include an analysis of their responses over time in an attempt to locate trends in reported career preference.

5. Academic Achievement -

   Existing school data on academic achievement will be compiled by grade in an effort to ascertain whether student achievement has increased, decreased, or remained constant over the eight years during which career education has been implemented in the Bowling Green City Schools.

CHAPTER 2

PROCEDURE

This section of the report contains a description of data sources, instrumentation, data collection procedures, and data analysis techniques utilized in this study. Each of the following subsections describes procedures relative to each of the five evaluation components.

Population and Sample

Professional Staff Survey

The population utilized for this component of the study included all teachers who had been associated with the Bowling Green schools for three years or more, plus all counselors and all administrators. From the listing of teachers, a proportionate sample was drawn from the elementary, junior high, and senior high levels. N's of 30 elementary, 15 junior high, and 15 high school teachers were sought, chosen on a random basis.

Since the numbers of counselors and principals were relatively small, all were included in the study.

Student Career Maturity

The population for the Career Maturity component of the evaluation included all seventh, ninth, and eleventh grade students in the Bowling Green schools, plus all students from those grades in a control school chosen (matched) for its similarity to Bowling Green. Two sample groups were chosen from these populations. Sample sizes of approximately 75 students per group per grade were randomly selected from intact homerooms. The control group consisted of students (homogeneous) who had only been minimally exposed to career education activities. The experimental group consisted of Bowling Green students who were exposed to the career education program. Data were analyzed for a total of 457 students.

Career Education Program Assessment (Grade 12)

For this component of the study, the population and the sample were one and the same. Data were gathered from all twelth grade students present the day the data were collected in the Bowling Green High School.

Record of Student Career Development

The total population included all students presently enrolled in the Bowling Green Schools, grades K-12. A ten percent sample (approximately 30-35 students per grade) was randomly chosen from student files. Thus, first grade students would have only one career choice listed, second graders two, etc. Beyond seventh grade, all students would have a potential of having listed seven career choices. This sampling provided aggregate grade level data over time, plus trends in individual records.

Academic Achievement

The population of students involved in this aspect of the study was all students who had participated in standardized achievement testing in Bowling Green over the last six years. School totals were utilized by grade, by year; therefore, no sampling procedure was utilized.

Data Collection and Instrumentation

Professional Staff Survey

To attain the objectives relative to this component, a questionnaire was developed and administered to the sample of staff members selected to participate in the study. Questionnaires were distributed by the Coordinator of Career Education to the principals of each teacher's school. Staff members completed the questionnaires and returned them to their principal, who in turn forwarded them back to the Career Education Coordinator. The sample of

teachers was contacted in advance, and their cooperation secured. Therefore, anonymity could be assured in the return of the questionnaires. Nearly a 100% overall return was achieved through this method.

The questionnaire utilized in this study was an adaptation of the instrument used by the NTS Research Corporation during the 1977 and 1978 evaluations of the Bowling Green Career Education Project. Additional measures were added to that instrument, the format altered, and forms combined so that the same version was applicable for teachers, counselors, and administrators. (See Attachment I)

The first section of the questionnaire contained demographic data on respondent characteristics. These data were used to describe the population and to provide cross-tabulations used in data analysis. These demographic data included:

1. Experience
2. Education
3. Sex
*4. Level of responsibility (K-7, 8-9, 10-12)
*5. Area of responsibility (Teacher, Counselor, Principal)
6. Occupational experience outside of education

This section of the instrument also contained questions relative to the staff member's perceptions of career education implementation in their school, and the amount and type of staff training in which they had participated.

The second section of the questionnaire provided respondents with a list of 40 career education activities. They were asked first to provide a rating for each activity relative to how frequently they conducted or participated in the activity. Possible responses included:

---

*Responses were cross-tabulated by these variables for presentation in the findings section of this report.

a. almost every day

b. once a week

c. once or twice a month

d. less than once a month

e. never

f. does not apply to my role in this school.

Next, respondents indicated, according to their role and the extent of involvement their school has had with career education, how frequently they felt they should be doing each activity. Choices included:

a. less

b. same amount

c. more.

Also related to the activities, respondents were asked to rate the importance they placed on each activity. Responses for this question ranged as follows:

a. low importance

b. of some importance

c. important

d. highly important.

This three-step procedure allowed more comprehensive analysis of the responses. If the last two scales were not utilized, a response of once or twice a month or less than once a month might be interpreted as a negative result, when, in actuality, it might not be considered necessary to participate in this activity frequently at this stage in program implementation (eighth year).

The third section of the questionnaire contained a list of 49 opinion statements relative to career education and its effects on students. Staff members responded to each opinion statement on a four-point scale with the choices:

a. strongly agree

b. agree

c. disagree

d. strongly disagree

Student Career Maturity

Student career maturity data were provided from the samples of seventh, ninth, and eleventh grade students during extended homeroom periods to facilitate data collection. The Career Maturity Inventory (CMI) was utilized as the measure of career maturity. The CMI, published by CTB/McGraw-Hill, measures variables common to two of Crites' dimensions of career maturity - Career Choice Competencies and Career Choice Attitudes. Formerly called the Vocational Development Inventory (VDI), the CMI consists of an Attitude Scale and a Competence Test which assess the two choice process dimensions mentioned to measure the following:

1. Orientation to the World-of-Work
2. Conceptions of Career Decision-Making
3. Involvement in Choice and Work
4. Independence in Career Choice
5. Preference for Factors in Career Choice (Crites, 1974, p. 2)

The Competence Test is composed of five subtests which assess the four stages of career choice. The four steps and the respective subtests are:

1. Information-Gathering - Knowing Yourself - Knowing About Jobs
2. Goal-Selection - Choosing a Job
3. Planning - Looking Ahead
4. Problem-Solving - What Should They Do? (Crites, 1974, p. 2)

Crites states that the CMI is appropriate as an assessment technique in several settings. He further asserts when a Career Education program has been

initiated, the CMI has special value in evaluating the effectiveness of the program (Crites, 1974, p. 2).

Numerous reliability and validity studies have been conducted with the CMI, especially the older Attitude Scale. Content validity for the Aptitude Scale was established in a study of the agreement between the empirical scoring key and one derived "rationally" (Crites, 1973, p. 15). A panel of judges was asked to choose the more mature response to each attitude item. The judges agreed with the national standardization sample on 37 items (74%). Criterion related validity has been demonstrated in several studies which found significant correlations between the Attitude Scale and other scales which were designed to measure criterion variables directly (Crites, 1973, pp. 15-16). To establish criterion validity, studies were conducted to assess response bias (response set bias and response style bias were found to be negligible) and correlated with other variables (most background variables were not related to the scale; the scale correlated significantly with several intelligence, aptitude, and personality scales) (Crites, 1973, pp. 16-21.)

Reliability studies showed an overall internal consistency coefficient of .74 for grades 6 through 12. The test-retest reliability (stability) coefficient was .71, a correlation which was termed "low enough to allow for maturational variance but high enough to establish systematic measurement of the variable being quantified" (Crites, 1973, p. 14).

The Competence Test has not been used as long as the Attitude Scale; thus, the number of studies using this section of the CMI is smaller. Internal consistency measures are available, however most of the correlations within subtests range from .72 to .90, establishing that the five parts of the test consists of relatively homogeneous sets of items (Crites, 1973, p. 33).

Some validity studies have also been conducted. Content and criterion-related validity were demonstrated in studies which showed the test to be

systematically related to time (expressed as grade levels). The product-moment correlation among the five subtests was found to be .54, within the range of the approximate correlation hypothesized from the construct (Crites, 1973, pp. 34-35).

Career Education Program Assessment (Grade 12)

Twelfth grade assessment data were also gathered during homeroom periods. Students were provided with an optical scan scoring sheet for marking responses and the assessment instrument. Completion time was less than 20 minutes.

The assessment instrument was an adaptation of an instrument utilized in the Career Education Needs Assessments in Wisconsin, Alabama, and Kentucky (Attachment 2). The instrument contained two major sections. First, students were asked to indicate on a "yes", "some," or "no" scale whether their school or teachers had provided them with various career education related information, training, or experiences. Thirty such statements were listed.

Second, students marked a rating which best described the degree to which they felt that they and other students from Bowling Green now needed help regarding each of the 18 potential needs areas. Responses to each statement in this section ranged as follows: (I need . . . .)

a. great deal more

b. more

c. same amount

d. less

e. don't know.

Record of Student Career Development

Data collection for this component of the evaluation involved transferring student data from the permanent records of a sample of Bowling Green Schools,

grades K-12 (See Attachment 3). An identification number was assigned each student selected in the sample. Opposite this number were recorded all available data relative to that student's tentative career choices as reported each year by the student. Additional data were generated on each year's choice. These additional data included:

1. the career cluster associated with the tentative choice - utilizing the 15 U.S.O.E. occupational clusters.
2. the level of occupational prestige associated with each career choice - utilizing "Roe's Two-dimensional Classification System, vertical dimension," (Shertzer, 1977).
3. the personality type associated with that occupation - utilizing Holland's classifications of personality types and work environments. Six personality types are identified on Holland's scale: (1) Realistic, (2) Investigative, (3) Social, (4) Conventional, (5) Enterprising, and (6) Artistic (Isaacson, 1973).

Academic Achievement

Measures of academic achievement were collected from central office files by grade, by year for the past six years. System reports generated as a function of each year's testing were obtained and appropriate grade-level totals were recorded. Due to inconsistency in the testing procedure over time, complete grade and year data were not available. Totals were collected as available for utilization in the interpretations.

The Stanford Achievement Test was utilized by Bowling Green as its major achievement instrument prior to the 1978-79 school year. At that time, the California Comprehensive Tests of Basic Skills (the instrument used in the State Testing Program for Kentucky), the CTBS, was adopted by the school.

It was anticipated that lack of consistent data would hamper effective analysis of the achievement results.

Data Analysis

Professional Staff Survey

Data from the professional staff survey were analyzed through the generation of descriptive statistics based on staff responses. Item means were calculated and demographic variables were used to classify respondents on the basis of position (principal, counselor, or teacher) and by level of responsibility (K-7, 8-9, or 10-12). Mean responses were cross-tabulated and analyzed for these subgroups relative to respondent participation in career education activities and opinions of the effects of career education. Cross-tabulation allowed both a measure of participation or opinion, as well as a comparison of responses across groups by position and by level. This analysis procedure provided an indication of differences in responses which might occur based on position or level taught.

Student Career Maturity

Analysis of career maturity data was accomplished through a quasi-experimental research design which compared the responses of experimental (Bowling Green) and control groups of students. In addition, the responses of the Bowling Green students were compared to the norms established for the Career Maturity Inventory (CMI).

Considering the experimental/control group analysis, the Analysis of Variance (ANOV) statistical technique was utilized to test the hypothesis of no difference between the scores achieved by the two groups of students. Means were calculated for each group on all CMI measures, and these means were compared to ascertain whether Group (career vs. non-career education) differences were

present and whether Sex (male vs. female) differences were present between the groups. Significant differences meant that real differences existed beyond chance expectation of differences between any two similar groups.

Career Education Program Assessment (Grade 12)

Analysis of data from this component consisted of the completion of response frequencies, i.e., what percentage of the students responded to each of the available choices. Where appropriate, these response rates were compared with state-wide data gathered in the Kentucky Needs Assessment for Career Education, 1978.

Record of Student Career Development

For purposes of this report, the tentative career choice data were visually scanned to determine the number of clusters represented for each student over time and to ascertain whether the choices of older students were confined to the same career cluster.

Academic Achievement

Analysis of data relative to academic achievement consisted of the construction and interpretation of two types of bar graphs. First, data by grade were presented by year as a grade equivalent score, thus allowing a multi-year analysis of grade-level scores over time. Second, the results for each grade were graphed over time by the percentage of students who achieved grade-level each year, thus allowing an evaluation over time within each individual class. Due to a variety of other possible intervening variables, analysis will be quite subjective and can only report trends over time. It would not be possible to draw any concrete causal relationships between the career education program and changes in achievement test patterns. However, explanation of data trends could include career education as a plausible effect on changes in achievement levels, since career education was the major program intervention during the reporting period.

CHAPTER 3

FINDINGS

Presented in this section of the report are the findings obtained from the evaluation of the Bowling Green Career Education Project. Data collection included five evaluative efforts, with each comprising a section of the findings. These five areas included:

(1) Professional Staff Survey

(2) Student Career Maturity

(3) Career Education Program Assessment (Grade 12)

(4) Record of Student Career Development

(5) Effects on Academic Achievement

The findings are organized into sections which correspond to the above five evaluative efforts.

Professional Staff Survey

During the previous two project years, professional staff members were asked to complete an assessment instrument designed to ascertain how frequently they participated in various career education activities and their opinion relative to selected statements concerning career education. During the present evaluation, a similar instrument was utilized, with some modification. Responses to the previous year's instrument left the reader with an unfavorable impression if the respondent indicated that he/she did not take part in an activity frequently. However, since career education had been implemented for some time in the Bowling Green schools, it became apparent to project staff that certain activities did not need to occur with the same frequency as they might have occurred during the early years of implementation. Therefore, a second section was added to the survey instrument. This column was a measure

of optimal frequency of occurrence. Staff first rated how frequently they participated in an activity, then indicated whether, at this point in their implementation, they thought that they should be doing this activity about the same amount, should they be doing it more, or might they now do it less. An additional new rating was also obtained regarding the importance of the activity to the career education program. The opinion section remained the same.

Contained in the following tables and narrative are the results obtained from the professional staff survey. All principals and counselors were surveyed, plus a sample of teachers from the elementary through the high school. Results are reported first by respondent position: (1) Principal, (2) Counselor, and (3) Teacher. Selected results were further tabulated by primary level of student responsibility: (1) K-7, (2) 8-9, and (3) 10-12 grade level.

Respondent Characteristics

Staff members were first asked a series of questions to ascertain respondent characteristics. These data are presented in Tables One to Five.

The majority of respondents were females with more than ten years experience. Nearly two-thirds of the respondents were women and over 85 percent were veterans of 10 years or more in the profession. Also, most had achieved advanced degrees and held the Masters Degree or above. All principals and counselors were surveyed, and numbered eight and seven respectively. Seventy-five percent of the respondents were classroom teachers. Most taught at the K-7 level, with the remainder being involved with the 8-9 and 10-12 grade levels.

Table 1. Respondents' Sex

Sex	Number	Percent
Male	21	33.87
Female	41	66.13
Total	62	100.00

Table 2. Years Experience in Education

Experience	Number	Percent
1-5	1	1.61
6-10	8	12.90
11-15	15	24.19
Over 15	38	61.29
Total	62	100.00

Table 3. Highest Degree Held

Degree	Number	Percent
Bachelors	7	11.29
Masters	22	35.48
Rank I/Specialist	33	53.23
Total	62	100.00

Table 4. Respondents' Position

Position	Number	Percent
Principal	8	12.90
Counselor	7	11.29
Classroom Teacher	47	75.81
Total	62	100.00

Table 5. Grade Level Responsibility of Respondents

Level	Number	Percent
K-7	34	54.84
8-9	16	25.81
10-12	12	19.35
Total	62	100.00

Information Items

Respondents were also asked a series of questions dealing with their past training and work experience in career education, and their opinion of its position in the Bowling Green Schools. These data have been cross-tabulated by respondent position.

Presented in Table 6 are responses to a question designed to ascertain work experience outside education. Over one third of the respondents had not participated in any other form of work other than education. However, that leaves nearly two of every three respondents with at least one and possibly four or more work experiences outside of education.

Table 6. Outside Work Experience by Position

Position	Outside Work Experiences										Total	
	0		One		Two		Three		Four			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Principal	3	37.5	0	0.0	2	25.0	2	25.0	1	12.5	8	12.9
Counselor	2	26.8	2	28.6	1	14.3	1	14.3	1	14.3	7	11.3
Teacher	18	38.3	10	21.3	6	12.8	5	10.6	8	17.0	47	75.8
Total	23	37.1	12	19.4	9	14.5	8	12.9	10	16.1	62	100.0

A series of four questions was asked concerning the staff member's perceptions of the status of career education and their preparation for and understanding of it. The results are self-explanatory and are presented in Tables Seven to 10. All respondents felt that career education was being actively implemented in their school. All but one respondent indicated a "Good" understanding of career education, and the vast majority felt that they were adequately prepared for implementing career education. Approximately two-thirds "Strongly Agreed" with career education goals and objectives, with no one reporting disagreement.

Table 7. Extent to Which Respondents Felt Career Education was being Implemented by Their School

Position	Extent Implemented			
	Actively Implemented		Approved, but not Implemented	Under Discussion
	No.	%		
Principal	8	100.0	0.0	0.0
Counselor	7	100.0	0.0	0.0
Teacher	47	100.0	0.0	0.0

Table 8. Respondents' Understanding of Career Education

Position	Reported Understanding						Total	
	Good		Partial		Lacking			
	No.	%	No.	%	No.	%	No.	%
Principal	8	100.0	0	0.0	0	0.0	8	100.0
Counselor	7	100.0	0	0.0	0	0.0	7	100.0
Teaching	46	97.9	1	2.1	0	0.0	47	100.0
Total	61		1		0		62	100.0

Table 9. Respondents' Preparation for Implementing Career Education by Position

Position	Reported Preparation								Total	
	Adequate		Moderate		Slight		Not			
	No.	%	No.	%	No.	%	No.	%	No.	%
Principal	7	87.5	1	12.5	0	0.0	0	0.0	8	
Counselor	7	100.0	0	0.0	0	0.0	0	0.0	7	
Teachers	42	89.4	4	8.5	0	0.0	1	2.1	47	
Total	56		5		0		1		62	100.0

Table 10. Respondents' Agreement with Career Education Goals and Objectives by Position

Position	Level of Agreement								Don't Understand	
	Strongly Agree		Agree		Disagree		Strongly Disagree			
	No.	%	No.	%	No.	%	No.	%	No.	%
Principal	5	62.5	3	37.5	0	0.0	0	0.0	0	0.0
Counselor	6	85.7	1	14.3	0	0.0	0	0.0	0	0.0
Teacher	32	68.1	14	29.8	0	0.0	0	0.0	1	2.1
Total	43		18		0		0		1	

Most respondents had accumulated over 50 hours of staff development time, with over 40 percent reporting over 100 hours of staff development activity. Presented in Tables 11 and 12 are the types of training received and those areas where additional training needs were indicated. Overall, the area of career guidance/counseling techniques has received the least emphasis in staff training. Teachers particularly report little effort in this area and 19.1 percent of the tachers indicate a need for more training in this area. Involving parents was the second most notable area, with 37.5 and 28.6 percent of the principals and counselors respectively indicating additional training needs.

Table 11. Percentage of Respondents Receiving Various Types of Career Education Staff Development by Position

Staff Development Activity	Percentage by Position		
	Principal	Counselor	Teacher
Career Education Concepts	100.0	100.0	91.5
Teaching Techniques	87.5	85.7	87.2
Curriculum Materials	100.0	100.0	95.7
Guidance/Counseling	62.5	100.0	31.9
Evaluation Techniques	87.5	85.7	68.1
Community Resources	100.0	100.0	89.4
Involving Parents	75.0	71.4	76.6

Table 12. Percentage of Respondents Indicating Needs for Additional Staff Development Activities by Position

Staff Development Activity	Percentage by Position		
	Principal	Counselor	Teacher
Career Education Concepts	0.0	0.0	2.1
Teaching Strategies	12.5	0.0	2.1
Curriculum Materials	0.0	0.0	4.2
Guidance/Counseling	0.0	28.6	19.1
Evaluation Techniques	12.5	0.0	8.5
Community Resources	0.0	0.0	2.1
Involving Parents	37.5	28.6	6.4

Career Education Activities

The following section of the report consists of three tables designed to report findings relative to (1) the frequency with which the respondents conduct or participate in each of several career education activities, (2) the extent to which they feel they should be participating in the activity, and (3) the importance they place on the activity. Tables on each of the above three measures are presented for each respondent position.

Presented in Table 13 are the responses of principals. Column one provides a measure of how frequently principals indicated that they participated in each activity based on the choices listed above Table 13. Reported in column two is their opinion of whether they feel they should be doing this activity less (l), the same amount (s), or more (m). These responses were coded l = 1, s = 2, and m = 3, and an average score was calculated for each activity. For reporting purposes a score of 1.0 to 1.6 resulted in an assignment of 1, indicating they perceived that they should be doing this activity less frequently. A score of

Table 13. Principal's Participation in Various Career Education Activities by Frequency, Optimal Frequency and Level of Importance

Column 1. Frequency	Column 2. Optimum Frequency	Column 3. Importance
1 = almost every day 2 = once a week 3 = once or twice a month 4 = less than once a month 5 = never	l = less s = same amount m = more	1 = low importance 2 = of some importance 3 = important 4 = highly important

Activity	Mean Principal Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
1. Present the relationship between basic subject skills (such as math, reading, etc.) and particular careers.	2.5	s	3.6
2. Have students participate in follow-up discussion after career education field trips.	3.3	s	3.5
3. Take part in developing career education curriculum units and materials for myself or others.	3.4	m	2.7
4. Team with guidance/counseling personnel to present career-oriented activities in the classroom.	3.5	s	2.8
5. Have students participate in simulated work experiences in the school.	3.7	m	2.8
6. Have other school staff present information about their specific career skills to the students.	3.2	s	3.4
7. Use parents to present career related information to the students.	3.3	m	3.0
8. Have people (other than parents) from business, labor or industry present information about careers to the students.	2.8	m	3.5
9. Advise individual students about career possibilities.	3.6	s	2.5
10. Team with other staff members or teachers to present career-oriented activities to students.	3.8	m	3.2

Table 13. (Continued)

Activity	Mean Principal Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
11. Have students participate in career related group guidance sessions.	3.8	m	3.4
12. Assist students in how to make career decisions.	3.3	s	3.0
13. Have students learn job getting and job seeking skills such as how to fill out an application form, how to prepare a resume, and how to behave on a job interview.	3.5	s	3.3
14. Have students go on field trips to businesses or industries.	3.4	s	3.4
15. Assess student knowledge of the world of work through self-made or commercial tests.	3.8	s	3.0
16. Have students engage in activities aimed at reducing sex and race stereotyping in their career choices.	3.3	s	3.0
17. Have students participate in shadowing (following and observing workers) activities.	3.5	s	2.8
18. Have students study the relationship among interests and abilities and various careers.	3.0	s	3.5
19. Actively assist in the occupational placement of school leavers.	4.0	s	2.4
20. Have students use TV, tape, filmstrips or radio to learn about occupations.	3.8	s	3.3
21. Assist students in clarifying their values related work.	3.4	s	3.4
22. Have students take home materials related to career options and opportunities for them and their parents to work on together.	3.8	s	3.3
23. Give career related interest and/or aptitude inventories to students.	3.8	s	3.3

Table 13. (Continued)

Activity	Mean Principal Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
24. Use people in the business, labor, and industry community to assist in part-time and full-time job placement programs.	3.7	s	2.8
25. Conduct systematic follow-up studies of former students to determine how well the school helped them learn about and prepare for work.	4.0	s	2.7
26. Have time to learn about and plan for career education.	3.0	s	2.7
27. Help place students in part-time work (paid or unpaid) while they are still in school or during vacation periods.	3.5	s	2.8
28. Speak to parents and other community groups about the importance of career education.	3.5	m	3.0
29. Develop a list of community members who could be used as career education resource persons in the classroom.	3.6	s	3.6
30. Communicate the school's career education program to parents and the business-labor-industry community.	3.1	s	3.4
31. Serve as an instructor in career education inservice training for school staff.	3.7	m	3.2
32. Help academic and vocational teachers in the school meet to identify ways they can cooperate in the career education program.	3.4	m	3.1
33. Interpret career education evaluation data to others in the school.	3.5	m	2.9
34. Distribute career-oriented materials to teachers for use with their students.	3.0	s	3.6
35. Devise career-oriented learning activities and communicate these to teachers.	3.6	s	3.0

Table 13. (Continued)

Activity	Mean Principal Ratings		
	1. Frequency	2. Optimum Frequency	3. Importance of Activity
36. Develop, or obtain from other sources, career education evaluation instruments.	4.0	s	3.3
37. Operate a career resource center for students.	3.2	s	3.4
38. Provide follow-through and/or job adjustment help to school leavers.	3.7	s	2.8
39. Complete a school-wide education needs assessment.	3.9	s	3.4
40. Team with teachers to present career-oriented activities in the classroom.	3.5	s	3.3

1.7 to 2.3 resulted in an (s) being assigned, indicating the same amount of effort. Scores of 2.4 or higher were assigned an (m) rating, indicating that principals thought that they should be engaging in that activity more often.

Column three was a rating of how important principals considered the activity to be. These ratings were on a four-point scale, from 1 = low to 4 = highly important. The principals were most active in presenting the relationships between basic subject skills (such as math, reading, etc.) and particular careers (Item 1.) Their score of 2.5 for this activity meant that they did this, on an average, somewhere between once a week and once or twice a month. Most other responses were 3.0 or over, indicating an activity frequency of once or twice a month, or less. An optimal frequency rating of 1.9 for this item indicated that they felt they were adequately active in that area, thus the (s) rating in column two. They also perceived the activity to be highly important (3.6 on the four-point scale).

The activity in which principals participated second most was "having people (other than parents) from business, labor or industry present information about careers to the students" - frequency of 2.8 (Item 8.) They further indicated a need to be more active in this area (m) and rated it as highly important.

Areas in which principals were less active included: (by item number)

19. Actively assist in the occupational placement of school leavers.
25. Conduct systematic follow-up studies of former students to determine how well the school helped them learn about and prepare for work.
36. Develop, or obtain from other sources, career education evaluation instruments.
39. Complete a school-wide education needs assessment.

As can be observed from the importance ratings, principals still considered these activities to be important, but the frequency of participation to be satisfactory (s).

Principals revealed a need for more activity in several areas. They saw a need to be more active in curriculum (3), in simulated work experience (5), in involving parents (7), in involving the community (8), in teaming with other staff (10), in group guidance (11), in speaking to community groups (28), in doing additional inservice (31), in helping bring academic and vocational teachers together (32), and in interpreting evaluation data (33). In no cases, did principals indicate that they should be less active. They considered most activities to be "important" or "highly important." Those receiving highest importance ratings included: relationship between subject skills and careers (1), having students discuss field trip (2), involving the community (8), having students study the relationship between interests and abilities and careers (18), developing lists of community resource people (29), and distributing materials to teachers (34).

Least important were: developing curriculum (3), advising individual students on career possibilities (9), assisting in the placement of school leavers (19), and having time to learn about and plan for career education (26).

Generally, the principals placed a high level of importance on all activities, they indicated an activity level of about once or twice a month, and considered their activity level as adequate at this point in program implementation.

Presented in Table 14 are counselor responses to the list of career education activities. Again, column one represented their frequency of participation, column two their assessment of the adequacy of that participation, and column three their rating of the activity's importance.

Counselors reported most activity in the areas of presenting the relationship between basic subject skills and particular career (1) and advising individual students about career possibilities (9). They were also quite active in assisting students in how to make career decisions (12).

Counselors were least active in serving as an instrutor in inservice training for school staff (31). Other areas of low involvement included working with students on shadowing (17), assisting in placement of school leavers (19), conducting follow-up (25), speaking to community groups (28), interpreting evaluation data (33), and doing school-wide career education needs assessments (39).

The counselors indicated a felt need for added participation in several areas. Among those were: advising individual students about careers (9), an area in which they previously indicated substantial activity; teaming with other teachers (10), and having students participate in group guidance (11). For the remaining activities, counselors indicated a need for sustaining about the same level of activity or slight increases; in no instances did they indicate that less activity was needed.

Table 14. Counselor's Participation in Various Career Education Activities by Frequency, Optimal Frequency and Level of Importance

Column 1. Frequency	Column 2. Optimum Frequency	Column 3. Importance
1 = almost every day 2 = once a week 3 = once or twice a month 4 = less than once a month 5 = never	l = less s = same amount m = more	1 = low importance 2 = of some importance 3 = important 4 = highly important

Activity	Mean Counselor Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
1. Present the relationship between basic subject skills (such as math, reading, etc.) and particular careers.	1.6	s	3.5
2. Have students participate in follow-up discussion after career education field trips.	3.5	s	2.7
3. Take part in developing career education curriculum units and materials for myself or others.	4.0	s	3.3
4. Team with guidance/counseling personnel to present career-oriented activities in the classroom.	3.8	m	3.2
5. Have students participate in simulated work experiences in the school.	3.7	s	3.5
6. Have other school staff present information about their specific career skills to the students.	4.3	s	2.8
7. Use parents to present career related information to the students.	4.0	s	3.4
8. Have people (other than parents) from business, labor or industry present information about careers to the students.	3.5	s	3.4
9. Advise individual students about career possibilities.	1.8	m	3.7
10. Team with other staff members or teachers to present career-oriented activities to students.	3.7	m	3.3

Table 14. (Continued)

Activity	Mean Counselor Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
11. Have students participate in career related group guidance sessions.	3.0	m	4.0
12. Assist students in how to make career decisions.	2.0	m	4 0
13. Have students learn job getting and job seeking skills such as how to fill out an application form, how to prepare a resume, and how to behave on a job interview.	3.8	s	3.4
14. Have students go on field trips to businesses or industries.	4.0	s	3.5
15. Assess student knowledge of the world of work through self-made or commercial tests.	3.7	s	3.4
16. Have students engage in activities aimed at reducing sex and race stereotyping in their career choices.	3.5	s	3.2
17. Have students participate in shadowing (following and observing workers) activities.	4.3	m	3.2
18. Have students study the relationship among interests and abilities and various careers.	2.8	s	3.8
19. Actively assist in the occupational placement of school leavers.	4.3	m	3.5
20. Have students use TV, tape, filmstrips or radio to learn about occupations.	3.6	s	3.3
21. Assist students in clarifying their values related work.	3.2	m	3.6
22. Have students take home materials related to career options and opportunities for them and their parents to work on together.	4.0	m	3.3
23. Give career related interest and/or aptitude inventories to students.	3.7	s	3.6

Table 14. (Continued)

Activity	Mean Counselor Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
24. Use people in the business, labor, and industry community to assist in part-time and full-time job placement programs.	4.0	s	3.0
25. Conduct systematic follow-up studies of former students to determine how well the school helped them learn about and prepare for work.	4.6	s	3.2
26. Have time to learn about and plan for career education.	3.6	s	3.2
27. Help place students in part-time work (paid or unpaid) while they are still in school or during vacation periods.	4.0	s	2.7
28. Speak to parents and other community groups about the importance of career education.	4.3	m	3.0
29. Develop a list of community members who could be used as career education resource persons in the classroom.	3.5	s	3.4
30. Communicate the school's career education program to parents and the business-labor-industry community.	3.8	s	3.5
31. Serve as an instructor in career education inservice training for school staff.	4.9	m	2.9
32. Help academic and vocational teachers in the school meet to identify ways they can cooperate in the career education program.	4.2	m	3.3
33. Interpret career education evaluation data to others in the school.	4.3	s	3.2
34. Distribute career-oriented materials to teachers for use with their students.	3.2	m	3.3
35. Devise career-oriented learning activities and communicate these to teachers.	3.8	m	3.5

Table 14. (Continued)

Activity	Mean Counselor Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
36. Develop, or obtain from other sources, career education evaluation instruments.	4.0	m	3.5
37. Operate a career resource center for students.	2.8	s	3.4
38. Provide follow-through and/or job adjustment help to school leavers.	4.0	s	3.0
39. Complete a school-wide education needs assessment.	4.3	s	3.2
40. Team with teachers to present career-oriented activities in the classroom.	3.4	m	3.5

Considering activity importance, counselors consistently provided activities with high ratings, generally between "important" and "highly important." Counselors only rated two activities less than 3.0 on the four-point scale. These lower ratings included a 2.7 for having students participate in follow-up discussions after field trips (2) and a 2.7 for helping place students in part-time work (27). They were unanimous with 4.0 ratings regarding the importance of having students participate in career related group sessions (11) and for assisting students in how to make career decisions (12). They also placed high importance on advising individual students about career possibilities (9) and on having students study the relationships among interests, abilities, and careers (18).

Overall, counselors placed greater importance on the activities than did principals, although principals also rated the activities as being quite important. Counselors were strongest on working with students and weakest in working with curriculum and program, including evaluation, follow-up, and needs assessment. They felt a need to work even more with students individually and in

group, and to team with other staff members.

Teacher responses to the activity section of the questionnaire are reported in Table 15. They too reported most activity in presenting the relationship between basic subject skills and particular careers (1). Their next highest activity areas were advising individual students about careers (9) and assisting students in how to make career decisions (12).

Teachers were least active in teaming with other staff members or teachers to present career oriented activities to students (10) and in teaming with guidance/counseling personnel to present career-oriented activities in the classroom (4).

Teachers were generally satisfied with their level of activity. Even for their least frequently conducted activity, teaming with other staff, they provided an (s) rating for optimal frequency, indicating that they felt that they were participating with adequate frequency.

One area for which teachers saw a need for increased involvement was in having students take home career materials to work on with their parents (22). The mean frequency rating of 4.3 revealed that this activity was one for which little activity currently existed.

Teachers placed most importance on presenting the relationship between basic skills and careers (1) and on having people other than parents present career information to students (8). They placed least importance on teaming with counselors (4) and on assessing student knowledge of the world of work (15).

In summary, all three groups of respondents were positive regarding the importance of the career education activities. The groups varied in degree, with counselors providing the highest importance ratings, principals second, and teachers third. Teachers, the group with the closest involvement in the program over the years, were generally satisfied with their current level of

Table 15. Teacher's Participation in Various Career Education Activities by Frequency, Optimal Frequency and Level of Importance

Column 1. Frequency	Column 2. Optimum Frequency	Column 3. Importance
1 = almost every day 2 = once a week 3 = once or twice a month 4 = less than once a month 5 = never	l = less s = same amount m = more	1 = low importance 2 = of some importance 3 = important 4 = highly important

Activity	Mean Teacher Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
1. Present the relationship between basic subject skills (such as math, reading, etc.) and particular careers.	2.0	s	3.4
2. Have students participate in follow-up discussion after career education field trips.	3.6	s	3.3
3. Take part in developing career education curriculum units and materials for myself or others.	3.2	s	3.3
4. Team with guidance/counseling personnel to present career-oriented activities in the classroom.	4.5	m	2.4
5. Have students participate in simulated work experiences in the school.	3.0	s	2.8
6. Have other school staff present information about their specific career skills to the students.	4.2	s	2.6
7. Use parents to present career related information to the students.	3.8	s	3.2
8. Have people (other than parents) from business, labor or industry present information about careers to the students.	3.7	m	3.4
9. Advise individual students about career possibilities.	2.6	s	3.2
10. Team with other staff members or teachers to present career-oriented activities to students.	4.7	s	2.6

Table 15. (Continued)

Activity	Mean Teacher Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
11. Have students participate in career related group guidance sessions.	4.1	s	2.7
12. Assist students in how to make career decisions.	2.9	s	3.2
13. Have students learn job getting and job seeking skills such as how to fill out an application form, how to prepare a resume, and how to behave on a job interview.	3.8	m	3.2
14. Have students go on field trips to businesses or industries.	4.1	m	3.1
15. Assess student knowledge of the world of work through self-made or commercial tests.	4.0	s	2.4
16. Have students engage in activities aimed at reducing sex and race stereotyping in their career choices.	3.7	s	2.7
17. Have students participate in shadowing (following and observing workers) activities.	4.2	s	2.6
18. Have students study the relationship among interests and abilities and various careers.	3.4	s	3.2
19. Actively assist in the occupational placement of school leavers.	4.3	s	2.7
20. Have students use TV, tape, filmstrips or radio to learn about occupations.	3.2	s	3.0
21. Assist students in clarifying their values related work.	2.6	s	3.1
22. Have students take home materials related to career options and opportunities for them and their parents to work on together.	4.3	m	2.6
23. Give career related interest and/or aptitude inventories to students.	4.2	s	2.7

Table 15. (Continued)

Activity	Mean Teacher Ratings 1. Frequency	2. Optimum Frequency	3. Importance of Activity
24. Use people in the business, labor, and industry community to assist in part-time and full-time job placement programs.	4.1	s	3.0
25. Conduct systematic follow-up studies of former students to determine how well the school helped them learn about and prepare for work.	4.4	m	3.0
26. Have time to learn about and plan for career education.	3.3	m	3.2
27. Help place students in part-time work (paid or unpaid) while they are still in school or during vacation periods.	3.7	s	2.8
28. Speak to parents and other community groups about the importance of career education.	4.1	m	2.8
29. Develop a list of community members who could be used as career education resource persons in the classroom.	3.6	s	3.3
30. Communicate the school's career education program to parents and the business-labor-industry community.	3.9	s	3.1
31. Serve as an instructor in career education inservice training for school staff.	4.4	s	2.7
32. Help academic and vocational teachers in the school meet to identify ways they can cooperate in the career education program.	4.3	s	2.9
33. Interpret career education evaluation data to others in the school.	4.3	s	2.5

activity at this point in implementation. Counselors saw a need for more involvement. In no case did any group of respondents reply that less activity in career education would be desirable.

Participation in career education activities was also assessed by level taught. the following three tables (Tables 16, 17, and 18) present these findings by frequency, by optimal frequency, and by importance.

Presented in Table 16 are the responses from those individuals with a K-7 responsibility. The elementary staff reported most activity in presenting the relationship between basic skills and careers (1) and in assisting students in clarifying their values related to work (21). Weekly activity or more was reported for these activities, as would be expected in a functioning career education program.

Elementary teachers were somewhat satisfied with their level of activity, but still saw a need for increased activity in several areas, including: teaming with counselors (4), an area for which they reported limited activity; for using parents and community (7)(8), also areas of low present activity; group guidance (11); job seeking skills (13); and in having time to learn about and plan for career education (26).

The elementary teachers generally considered the activities to be of importance. Rated highest was discussion after field trips (2), followed by numerous other teaching-related activities (1, 3, 7, 8, 18, 29). These latter activities were directly related to the classroom and included curriculum, teaching, using parents and community, studying interests/abilities and careers, and ascertaining who in the community could help in the classroom of for field trips.

Responses for individuals with an 8-9 grade responsibility are presented in Table 17. As with other groups, the major activity centered around presenting the relationship between basic skills and careers (1). These teachers were next most active in advising individual students about career possibilities (9) and

Table 16. Mean Frequency of Participation in Various Career Education Activities by Level Taught (K-7)

Column 1. Frequency	Column 2. Optimum Frequency	Column 3. Importance
1 = almost every day 2 = once a week 3 = once or twice a month 4 = less than once a month 5 = never	1 = less s = same amount m = more	1 = low importance 2 = of some importance 3 = important 4 = highly important

Activity	K-7 1. Frequency	2. Optimum Frequency	3. Importance of Activity
1. Present the relationship between basic subject skills (such as math, reading, etc.) and particular careers.	1.9	s	3.5
2. Have students participate in follow-up discussion after career education field trips.	3.2	s	3.6
3. Take part in developing career education curriculum units and materials for myself or others.	3.1	s	3.5
4. Team with guidance/counseling personnel to present career-oriented activities in the classroom.	4.3	m	2.8
5. Have students participate in simulated work experiences in the school.	3.1	s	3.0
6. Have other school staff present information about their specific career skills to the students.	4.0	s	2.9
7. Use parents to present career related information to the students.	3.7	m	3.5
8. Have people (other than parents) from business, labor or industry present information about careers to the students.	3.6	m	3.5
9. Advise individual students about career possibilities.	3.0	s	3.0
10. Team with other staff members or teachers to present career-oriented activities to students.	3.6	m	3.0

Table 16. (Continued)

Activity	K-7 1. Frequency	2. Optimum Frequency	3. Importance of Activity
11. Have students participate in career related group guidance sessions.	4.0	m	3.0
12. Assist students in how to make career decisions.	3.0	m	3.1
13. Have students learn job getting and job seeking skills such as how to fill out an application form, how to prepare a resume, and how to behave on a job interview.	3.6	m	3.0
14. Have students go on field trips to businesses or industries.	3.8	m	3.3
15. Assess student knowledge of the world of work through self-made or commercial tests.	4.0	s	2.6
16. Have students engage in activities aimed at reducing sex and race stereotyping in their career choices.	3.6	s	2.8
17. Have students participate in shadowing (following and observing workers) activities.	3.9	s	2.8
18. Have students study the relationship among interests and abilities and various careers.	3.3	s	3.4
19. Actively assist in the occupational placement of school leavers.	4.4	s	2.8
20. Have students use TV, tape, filmstrips or radio to learn about occupations.	3.1	s	3.3
21. Assist students in clarifying their values related work.	2.0	s	3.2
22. Have students take home materials related to career options and opportunities for them and their parents to work on together.	4.1	m	3.1
23. Give career related interest and/or aptitude inventories to students.	4.1	m	3.1

Table 16. (Continued)

Activity	K-7 1. Frequency	K-7 2. Optimum Frequency	K-7 3. Importance of Activity
24. Use people in the business, labor, and industry community to assist in part-time and full-time job placement programs.	4.0	s	3.0
25. Conduct systematic follow-up studies of former students to determine how well the school helped them learn about and prepare for work.	4.6	s	2.8
26. Have time to learn about and plan for career education.	3.2	m	3.2
27. Help place students in part-time work (paid or unpaid) while they are still in school or during vacation periods.	3.8	s	3.1
28. Speak to parents and other community groups about the importance of career education.	3.8	m	2.9
29. Develop a list of community members who could be used as career education resource persons in the classroom.	3.5	s	3.5
30. Communicate the school's career education program to parents and the business-labor-industry community.	3.7	s	3.2
31. Serve as an instructor in career education inservice training for school staff.	3.9	m	3.0
32. Help academic and vocational teachers in the school meet to identify ways they can cooperate in the career education program.	3.9	s	3.0
33. Interpret career education evaluation data to others in the school.	4.0	s	2.8
34. Distribute career-oriented materials to teachers for use with their students.	2.8	m	3.6
35. Devise career-oriented learning activities and communicate these to teachers.	3.5	m	3.4

Table 16. (Continued)

Activity	K-7 1. Frequency	2. Optimum Frequency	3. Importance of Activity
36. Develop, or obtain from other sources, career education evaluation instruments.	3.8	m	3.4
37. Operate a career resource center for students.	2.6	s	3.6
38. Provide follow-through and/or job adjustment help to school leavers.	3.5	m	3.3
39. Complete a school-wide education needs assessment.	3.8	m	3.6
40. Team with teachers to present career-oriented activities in the classroom.	3.2	m	3.4

in assisting students in how to make career decisions (12). Least activity was reported for conducting follow-up (25), for teaming with counselors (4), for having students participate in shadowing (17), and in using people from the community in part-time student job placements (24).

The junior high teachers indicated a need for increased involvement in several areas (column 2), including: field trip discussions (2), use of community resource persons (8), teaming with other staff (10), having additional field trip experiences (14), use of shadowing (17), conducting follow-ups to ascertain how well school helped students to prepare for work (25), and the necessity to speak to parent and community groups about the importance of career education (28).

Although the importance ratings provided by junior high teachers were not as high as those provided by the elementary group, they were still quite positive. Rated as not important was having students learn job getting and job seeking skills (13). Their present activity in that area was rated low and a

Table 17. Mean Frequency of Participation in Various Career Education Activities by Level Taught (8-9)

Column 1. Frequency	Column 2. Optimum Frequency	Column 3. Importance
1 = almost every day 2 = once a week 3 = once or twice a month 4 = less than once a month 5 = never	l = less s = same amount m = more	1 = low importance 2 = of some importance 3 = important 4 = highly important

Activity	8-9 1. Frequency	2. Optimum Frequency	3. Importance of Activity
1. Present the relationship between basic subject skills (such as math, reading, etc.) and particular careers.	2.1	s	3.4
2. Have students participate in follow-up discussion after career education field trips.	4.2	m	2.9
3. Take part in developing career education curriculum units and materials for myself or others.	3.6	s	2.8
4. Team with guidance/counseling personnel to present career-oriented activities in the classroom.	4.7	s	2.0
5. Have students participate in simulated work experiences in the school.	3.3	s	2.8
6. Have other school staff present information about their specific career skills to the students.	4.3	s	2.5
7. Use parents to present career related information to the students.	4.1	m	2.9
8. Have people (other than parents) from business, labor or industry present information about careers to the students.	4.0	m	3.2
9. Advise individual students about career possibilities.	2.5	s	3.3
10. Team with other staff members or teachers to present career-oriented activities to students.	4.5	m	2.4

Table 17. (Continued)

Activity	8-9 1. Frequency	2. Optimum Frequency	3. Importance of Activity
11. Have students participate in career related group guidance sessions.	3.5	s	2.9
12. Assist students in how to make career decisions.	2.8	s	3.4
13. Have students learn job getting and job seeking skills such as how to fill out an application form, how to prepare a resume, and how to behave on a job interview.	4.0	m	3.8
14. Have students go on field trips to businesses or industries.	4.4	m	3.1
15. Assess student knowledge of the world of work through self-made or commercial tests.	3.9	s	2.8
16. Have students engage in activities aimed at reducing sex and race stereotyping in their career choices.	3.7	s	2.8
17. Have students participate in shadowing (following and observing workers) activities.	4.7	m	2.5
18. Have students study the relationship among interests and abilities and various careers.	3.3	s	3.2
19. Actively assist in the occupational placement of school leavers.	4.5	s	2.5
20. Have students use TV, tape, filmstrips or radio to learn about occupations.	3.3	s	2.9
21. Assist students in clarifying their values related work.	2.9	m	3.1
22. Have students take home materials related to career options and opportunities for them and their parents to work on together.	2.2	m	4.1
23. Give career related interest and/or aptitude inventories to students.	4.2	s	2.7

Table 17. (Continued)

Activity	8-9 1. Frequency	2. Optimum Frequency	3. Importance of Activity
24. Use people in the business, labor, and industry community to assist in part-time and full-time job placement programs.	4.6	m	2.7
25. Conduct systematic follow-up studies of former students to determine how well the school helped them learn about and prepare for work.	4.9	m	3.3
26. Have time to learn about and plan for career education.	3.6	s	3.1
27. Help place students in part-time work (paid or unpaid) while they are still in school or during vacation periods.	4.2	s	2.2
28. Speak to parents and other community groups about the importance of career education.	4.3	m	2.6
29. Develop a list of community members who could be used as career education resource persons in the classroom.	3.8	s	3.2
30. Communicate the school's career education program to parents and the business-labor-industry community.	3.9	m	3.1
31. Serve as an instructor in career education inservice training for school staff.	4.6	s	2.5
32. Help academic and vocational teachers in the school meet to identify ways they can cooperate in the career education program.	4.4	m	3.1
33. Interpret career education evaluation data to others in the school.	4.4	s	2.4
34. Distribute career-oriented materials to teachers for use with their students.	3.3	s	3.7
35. Devise career-oriented learning activities and communicate these to teachers.	4.0	s	2.7

Table 17. (Continued)

Activity	8-9 1. Frequency	2. Optimum Frequency	3. Importance of Activity
36. Develop, or obtain from other sources, career education evaluation instruments.	4.0	s	3.7
37. Operate a career resource center for students.	1.7	s	3.3
38. Provide follow-through and/or job adjustment help to school leavers.	4.0	s	2.7
39. Complete a school-wide education needs assessment.	4.0	s	3.5
40. Team with teachers to present career-oriented activities in the classroom.	4.0	s	3.3

need for increased involvement was indicated. Rated as second most important was assisting students in how to make career decisions (12). These teachers also indicated this to be a high activity area and one for which they felt adequate present involvement. Also rated as highly important was their first rated activity in regard to present frequency, presenting the relationship between basis and careers (1).

Rated as least important by the junior high teachers were: teaming with counselors (4), placing students in part-time work (27), and interpreting career education evaluation data (33).

The junior high teachers placed somewhat less importance on the career education activities than did the elementary teachers. However, they indicated a need for additional activity in at least the same magnitude as did the K-7 group. The frequency of involvement of the two groups were quite similar.

Presented in Table 18 are the responses of high school teachers. As with previous groups, the high school teachers reported most involvement in relating

Table 18. Mean Frequency of Participation in Various Career Education Activities by Level Taught (10-12)

Column 1. Frequency	Column 2. Optimum Frequency	Column 3. Importance
1 = almost every day 2 = once a week 3 = once or twice a month 4 = less than once a month 5 = never	1 = less s = same amount m = more	1 = low importance 2 = of some importance 3 = important 4 = highly important

Activity	10-12 1. Frequency	2. Optimum Frequency	3. Importance of Activity
1. Present the relationship between basic subject skills (such as math, reading, etc.) and particular careers.	1.9	s	3.4
2. Have students participate in follow-up discussion after career education field trips.	3.8	s	3.0
3. Take part in developing career education curriculum units and materials for myself or others.	3.3	s	3.1
4. Team with guidance/counseling personnel to present career-oriented activities in the classroom.	4.3	s	2.5
5. Have students participate in simulated work experiences in the school.	2.7	s	2.8
6. Have other school staff present information about their specific career skills to the students.	4.2	s	2.5
7. Use parents to present career related information to the students.	3.7	s	3.0
8. Have people (other than parents) from business, labor or industry present information about careers to the students.	3.2	s	3.4
9. Advise individual students about career possibilities.	2.1	m	3.6
10. Team with other staff members or teachers to present career-oriented activities to students.	3.9	m	2.6

Table 18 (Continued)

Activity	10-12 1. Frequency	2. Optimum Frequency	3. Importance of Activity
11. Have students participate in career related group guidance sessions.	3.9	s	2.6
12. Assist students in how to make career decisions.	2.8	m	3.4
13. Have students learn job getting and job seeking skills such as how to fill out an application form, how to prepare a resume, and how to behave on a job interview.	3.6	s	2.9
14. Have students go on field trips to businesses or industries.	4.1	s	2.7
15. Assess student knowledge of the world of work through self-made or commercial tests.	4.0	s	2.3
16. Have students engage in activities aimed at reducing sex and race stereotyping in their career choices.	3.9	s	2.5
17. Have students participate in shadowing (following and observing workers) activities.	3.9	s	2.6
18. Have students study the relationship among interests and abilities and various careers.	3.5	s	3.1
19. Actively assist in the occupational placement of school leavers.	3.9	s	2.9
20. Have students use TV, tape, filmstrips or radio to learn about occupations.	3.5	s	2.8
21. Assist students in clarifying their values related work.	2.8	s	3.3
22. Have students take home materials related to career options and opportunities for them and their parents to work on together.	4.1	s	2.6
23. Give career related interest and/or aptitude inventories to students.	3.9	s	2.6

Table 18. (Continued)

Activity	10-12 1. Frequency	2. Optimum Frequency	3. Importance of Activity
24. Use people in the business, labor, and industry community to assist in part-time and full-time job placement programs.	3.6	s	3.1
25. Conduct systematic follow-up studies of former students to determine how well the school helped them learn about and prepare for work.	4.0	m	3.1
26. Have time to learn about and plan for career education.	3.3	m	3.1
27. Help place students in part-time work (paid or unpaid) while they are still in school or during vacation periods.	3.5	s	2.7
28. Speak to parents and other community groups about the importance of career education.	4.3	m	2.9
29. Develop a list of community members who could be used as career education resource persons in the classroom.	3.7	s	3.1
30. Communicate the school's career education program to parents and the business-labor-industry community.	3.7	s	3.2
31. Serve as an instructor in career education inservice training for school staff.	4.3	s	2.6
32. Help academic and vocational teachers in the school meet to identify ways they can cooperate in the career education program.	3.5	s	2.9
33. Interpret career education evaluation data to others in the school.	4.4	s	2.3
34. Distribute career-oriented materials to teachers for use with their students.	4.0	1	3.0
35. Devise career-oriented learning activities and communicate these to teachers.	4.0	1	3.0

Table 18. (Continued)

Activity	10-12 1. Frequency	2. Optimum Frequency	3. Importance of Activity
36. Develop, or obtain from other sources, career education evaluation instruments.	4.5	s	3.0
37. Operate a career resource center for students.	4.5	1	3.0
38. Provide follow-through and/or job adjustment help to school leavers.	4.0	1	2.5
39. Complete a school-wide education needs assessment.	4.5	1	2.0
40. Team with teachers to present career-oriented activities in the classroom.	4.5	s	3.0

the basics to careers (1) and in advising individual students about career possibilities (9). Also high were: having students participate in simulated work experiences (5), assisting students in how to make career decisions (12), and assisting students in clarifying their values related to work (21).

Least activity was reported for teaming with counselors (4), having other school staff (6), having students participate in field trips (14), having students take home materials to go over with parents (22), speaking to parents or community groups about the importance of career education (28), serving as an inservice instructor (31) and interpreting evaluation data (33).

Secondary teachers reported less need for increased activity than did other groups. For most areas of low activity just discussed, the secondary teachers do not feel that additional activity is warranted at this time. An exception was for speaking to parents and community groups about career education. The secondary teachers did see a need for more activity in this area.

The importance ratings of the high school teachers were very similar to the junior high group, but lower than the elementary teachers. Rated most

important were advising students about careers (9), presenting the relationships between the basics and careers (1), and having people from the community present information about careers to the students (8). Rated as least important were having other school staff present information to the students (6) and having students engage in activity aimed at reducing sex and race stereotyping in their career choice (16).

Overall, the high school teachers reported present levels of activity in career education quite similar to the two other groups; however, they also reported less need to increase the level of activity and provided somewhat lower importance ratings.

Staff Opinion of Career Education

The Opinion Section of the questionnaire was designed to assess professional staff opinions on forty statements related to career education. Professional staff members indicated their degree of concurrence with the forty statements on a scale of 1 (strongly disagree) to 4 (strongly agree).

Staff members were categorized by position: Principal, Counselor, Teacher and by level: K-7, 8-9, 10-12. Mean responses were calculated for each position and level on each statement. These responses, by position, are presented in Table 19. Mean responses for 1978 were available by position and are also shown for comparison purposes.

Inspection of Table 19 reveals a number of items with which staff members were in agreement or strong agreement. Especially high were items 4, 6, 14, 17, 27, 31, 33, 35. These items are in various ways supportive of the career education concept, e.g., (6) "Active participation in a career education program will enhance a teacher's overall teaching" and, (4) "Classroom teachers have a responsibility to help students gain an appreciation of the value and importance of work."

Table 19. Respondent's Opinion of Career Education Statements by Position

1. Strongly Disagree	3. Agree
2. Disagree	4. Strongly Agree

Statement	Mean Response by Position, by Year					
	Principal		Counselor		Teacher	
	1978	1979	1978	1979	1978	1979
1. Too many of our students leave our schools lacking the work habits necessary for making a successful transition from school to work.	3.5	3.0	3.3	3.4	2.9	3.1
2. It is not an appropriate role of our school to ask the home and family to provide career-oriented activities for their children.	2.1	1.9	1.6	1.3	1.9	1.9
3. Training in career education should be required for certification of education personnel.	3.3	3.3	3.6	3.1	2.6	2.9
4. Classroom teachers have a responsibility to help students gain an appreciation of the value and importance of work.	3.0	3.6	4.0	3.6	3.2	3.7
5. Elementary school is too early for students to start thinking about career possibilities.	1.5	1.4	1.1	1.3	1.9	1.5
6. Active participation in a career education program will enhance a teacher's overall teaching effectiveness.	3.3	3.6	3.0	3.7	2.8	3.3
7. The relationship between education and work can be most meaningfully taught as a separate course.	1.8	1.1	1.6	1.1	2.0	1.6
8. A career education program does not change the role of the counselor.	2.8	2.6	2.1	2.7	2.6	2.8
9. Career education will have little effect on the career aspirations of students compared with the effect of their socio-economic status.	3.2	1.6	2.0	1.9	2.1	2.0

Table 19. (Continued)

Statement	Mean Response by Position, by Year					
	Principal		Counselor		Teacher	
	1978	1979	1978	1979	1978	1979
10. Accomplishment through a paid occupation is necessary in order to gain in personal understanding and have a positive self-concept.	2.7	2.8	2.3	2.9	2.5	2.7
11. Acquainting minority and female students with occupations not traditionally held by members of their sex or race is an important outcome of career education.	3.2	2.9	3.3	3.1	3.0	3.2
12. Business and labor representatives should advise educators about school programs, but it is not appropriate for these lay persons to participate in joint decision-making with educators.	1.8	2.0	2.0	1.9	2.4	2.2
13. It does not take a lot of money to begin implementing career education.	2.8	3.1	3.1	3.3	2.9	3.2
14. It is hard to be happy if one cannot find meaning in the work that one does.	3.8	3.4	3.5	3.6	3.3	3.6
15. As part of the school program, students should be involved in a variety of work experiences in the community.	3.2	3.1	3.2	3.1	2.9	3.2
16. Schools without career education do an adequate job of preparing students for careers.	1.7	1.7	1.7	1.7	2.1	2.0
17. An effective program of career education will result in more realistic career aspirations for students.	3.3	3.3	3.8	3.9	3.1	3.2
18. Infusing career education into the curriculum enhances student interest in learning.	3.2	2.9	3.8	3.6	3.0	3.2
19. An active career education program will detract from learning basic academic skills.	2.2	1.7	1.5	1.4	2.0	1.6

Table 19. (Continued)

Statement	Mean Response by Position, by Year					
	Principal		Counselor		Teacher	
	1978	1979	1978	1979	1978	1979
20. Our career education program has improved student attendance rates.	2.8	2.8	3.5	2.9	2.7	2.8
21. Career education fosters premature career decisions.	2.0	2.1	2.3	1.9	2.2	2.0
22. Schools should not be responsible for teaching students how to write a resume, how to conduct oneself in an employment interview and other job getting skills.	2.0	1.7	2.5	1.3	1.8	1.5
23. Career education is more important for the non-college bound student than for the college bound.	2.2	2.3	2.0	1.6	2.2	1.9
24. Few business people in this community have the time and the interest to give career-related presentations to school classes.	1.7	1.7	1.5	2.1	1.9	1.7
25. In the past, most students have made appropriate educational and career decisions without career education.	2.0	2.3	2.0	2.0	2.2	2.2
26. To infuse career education into the curriculum would foster the achievement of other instructional objectives.	2.7	2.9	3.2	3.1	2.9	3.0
27. A college degree is no longer a pre-requisite for occupational success.	3.2	3.3	3.5	3.4	3.1	3.4
28. The career of most people begins with their first paid job and ends upon retirement.	2.6	2.6	2.8	2.7	2.3	2.4
29. Career education cannot be done effectively without the addition of new courses and new facilities to the present educational program.	1.6	1.6	2.2	1.7	2.1	2.0
30. Helping female students consider traditionally male careers is a proper role for parents but not the schools.	2.2	1.8	1.7	1.9	2.0	1.7

Table 19. (Continued)

Statement	Mean Response by Position, by Year					
	Principal		Counselor		Teacher	
	1978	1979	1978	1979	1978	1979
31. Work experience should be possible for all students not just for those in vocational education.	3.0	3.3	3.3	3.6	3.0	3.2
32. It is important to prepare people for the unpaid work, as well as the paid work, that they will do.	3.1	3.3	3.3	3.4	3.1	3.4
33. Parents are good career education resource persons to use in the classroom.	3.6	3.4	3.6	3.4	3.2	3.5
34. Career education is asking teachers to take on the role of the counselor.	1.8	2.0	2.0	2.6	2.1	2.2
35. Career education should be an integral part of the curriculum for all students from kindergarten through grade 12.	3.2	3.3	3.8	3.3	3.0	3.5
36. Career education is really quite different from vocational education.	2.8	3.0	3.2	2.4	2.7	2.7
37. Without an effective career education program most students, upon graduation, would lack the decision-making skills necessary for adapting in today's rapidly changing world.	2.0	2.9	3.2	2.9	2.7	2.0
38. One of the responsibilities of the schools is job placement for all students who desire to work.	2.8	2.4	2.8	2.7	2.2	2.3
39. Career education is just a fad.	2.2	1.4	1.3	1.3	1.9	1.5
40. "Work" and "job" really mean the same thing.	2.2	2.4	2.2	2.7	2.3	2.2

There was also strong agreement that meaning in one's work is essential to happiness (14), and that parents are good career education resource persons for classrooms (33).

Staff members indicated disagreement with a number of items, especially items 5, 7, 16, 19, 21, 22, 24, 29, 30, and 39. They disagreed especially strongly with items such as (7) "The relationships between education and work can be most meaningfully taught as a separate course," (5) "Elementary school is too early for students to start thinking about career possibilities," and (39) "Career education is just a fad."

Principals, counselors and teachers were in general agreement with each other. Only a few scores showed significant differences between staff groups. Counselors recorded considerably more agreement that "Infusing career education into the curriculum enhances student interest in learning (18)." Principals disagreed with Item 23, "Career education is more important for the non-college bound student than for the college bound," while counselors disagreed even more strongly.

Principals and teachers disagreed with the statement that "career education is asking teachers to take on the role of the counselor" (34), while counselors recorded a score between disagree and agree.

Principals agreed that "career education is really quite different from vocational education," while counselors showed less agreement.

Scores for 1978 are listed beside 1979 scores for comparison purposes. Inspection reveals that many scores have not changed, or changed very little. Some, however, showed changes that are more significant. While principals still agree that too many students leave school lacking necessary work habits, (1) they are less strongly convinced than they were in 1978. In other words, they felt that, in 1979, the school was doing a better job in preparing school leavers. Counselors agree, but less strongly than in 1978, that "training in career education should be required for certification" (3). Teachers and principals increased while counselors decreased in agreement that "classroom

teachers have a responsibility to help students gain an appreciation of the value and importance of work" (4).

Counselors' scores showed increased agreement in the importance of a teacher's active participation in a career education program (6).

All categories of staff moved toward stronger disagreement with the idea of education and work relationships being taught as a separate course (7).

Item 9 showed an especially large change for principals, bringing that group more nearly in congruence with teachers and counselors. Principals moved from agreement to a neutral position regarding the statement, "Career education will have little effect on the career aspirations of students compared with the effect of their socio-economic status (9)."

All classes moved to more strong disagreement with Item 22, "School should not be responsible for teaching students how to write a resume, how to conduct oneself in an employment interview, and other job getting skills." However, counselors showed the most change, moving from neutrality to fairly strong disagreement.

Counselors showed less agreement with the concept of career education being quite different from vocational education (36), indicating a need to more adequately define such differences to that group.

Principals showed considerable increase in agreement with the idea of career education providing decision making skills (37). They also moved toward more strongly disagreeing that career education is just a fad (39).

For an additional analysis of staff opinion, the scores were categorized by level for each statement. The levels kindergarten through seventh grades (K-7), eighth and ninth grades (8-9), tenth through twelfth grades (10-12) were used. Means were calculated for each statement, using a four point

scale: 1 = Strongly Disagree to 4 = Strongly Agree. These findings are presented in Table 20. The 1978 findings were not presented by level taught. Therefore, only 1979 data are presented for this analysis.

Table 20. Respondent's Opinion of Career Education Statements by Level (1979)

1. Strongly Disagree	3. Agree
2. Disagree	4. Strongly Agree

Statement	Mean Response by Level K-7	8-9	10-12
1. Too many of our students leave our schools lacking the work habits necessary for making a successful transition from school to work.	3.3	2.9	3.1
2. It is not an appropriate role of our school to ask the home and family to provide career-oriented activities for their children.	1.6	2.0	1.8
3. Training in career education should be required for certification of education personnel.	3.1	2.9	2.9
4. Classroom teachers have a responsibility to help students gain an appreciation of the value and importance of work.	3.7	3.7	3.5
5. Elementary school is too early for students to start thinking about career possibilities.	1.4	1.6	1.7
6. Active participation in a career education program will enhance a teacher's overall teaching effectiveness.	3.4	3.4	3.1
7. The relationships between education and work can be most meaningfully taught as a separate course.	1.4	1.7	1.3
8. A career education program does not change the role of the counselor.	2.8	3.0	2.3
9. Career education will have little effect on the career aspirations of students compared with the effect of their socioeconomic status.	1.8	2.1	2.0
10. Accomplishment through a paid occupation is necessary in order to gain in personal understanding and have a positive self-concept.	2.6	2.5	3.2

Table 20. (Continued)

Statement	Mean Response by Level K-7	8-9	10-12
11. Acquainting minority and female students with occupations not traditionally held by members of their sex or race is an important outcome of career education.	3.1	3.2	3.0
12. Business and labor representatives should advise educators about school programs, but it is not appropriate for these lay persons to participate in joint decision-making with educators.	2.3	2.1	1.8
13. It does not take a lot of money to begin implementing career education.	3.3	3.3	2.8
14. It is hard to be happy if one cannot find meaning in the work that one does.	3.6	3.6	3.5
15. As part of the school program, students should be involved in a variety of work experiences in the community.	3.2	3.3	2.9
16. Schools without career education do an adequate job of preparing students for careers.	1.8	2.1	2.0
17. An effective program of career education will result in more realistic career aspirations for students.	3.4	3.3	3.3
18. Infusing career education into the curriculum enhances student interest in learning.	3.2	3.2	3.0
19. An active career education program will detract from learning basic academic skills.	1.5	1.7	1.7
20. Our career education program has improved student attendance rates.	2.8	2.9	2.5
21. Career education fosters premature career decisions.	2.0	1.8	2.0
22. Schools should not be responsible for teaching students how to write a resume, how to conduct oneself in an employment interview and other job getting skills.	1.6	1.3	1.4
23. Career education is more important for the non-college bound student than for the college bound.	1.9	1.8	1.9

Table 20. (Continued)

Statement	Mean Response by Level K-7	8-9	10-12
24. Few business people in this community have the time and the interest to give career-related presentations to school classes.	1.7	1.8	1.7
25. In the past, most students have made appropriate educational and career decisions without career education.	2.2	2.2	2.2
26. To infuse career education into the curriculum would foster the achievement of other instructional objectives.	3.0	2.9	3.2
27. A college degree is no longer a pre-requisite for occupational success.	3.2	3.6	3.5
28. The career of most people begins with their first paid job and ends upon retirement.	2.5	2.3	2.6
29. Career education cannot be done effectively without the addition of new courses and new facilities to the present educational program.	1.6	2.2	2.3
30. Helping female students consider traditionally male careers is a proper role for parents but not for the schools.	1.7	1.7	1.7
31. Work experience should be possible for all students not just for those in vocational education.	3.2	3.4	3.2
32. It is important to prepare people for the unpaid work, as well as the paid work that they will do.	3.4	3.5	3.2
33. Parents are good career education resource persons to use in the classrooms.	3.7	3.3	3.3
34. Career education is asking teachers to take on the role of the counselor.	2.0	2.2	2.6
35. Career education should be an integral part of the curriculum for all students from kindergarten through grade 12.	3.4	3.5	3.3
36. Career education is really quite different from vocational education.	2.7	2.7	2.8

Table 20. (Continued)

Statement	Mean Response by Level K-7	8-9	10-12
37. Without an effective career education program most students, upon graduation, would lack the decision-making skills necessary for adapting in today's rapidly changing world.	2.3	2.7	2.9
38. One of the responsibilities of the schools is job placement for all students who desire to work.	2.5	2.0	2.6
39. Career education is just a fad.	1.4	1.3	1.8
40. "Work" and "job" really mean the same thing.	2.4	2.0	2.4

Inspection of Table 20 reveals a number of items with which staff members were in agreement or strong agreement. Especially high scores were recorded for items 4, 6, 14, 17, 32, 33, and 35. These areas were also high when means were calculated by position. Especially low (disagreement) scores were present for items 5, 7, 16, 19, 21, 22, 24, 29, 30, and 39. Again, these areas were low when scores were calculated by position.

Generally, the mean scores by level were similar for each statement. A few variations should be noted however. Level 8-9 agreed ($\bar{X}$=3.0) that "a career education program does not change the role of the counselors (8)." Level 10-12 respondents tended to disagree ($\bar{X}$=2.3), while K-7 people were in more agreement.

Level 10-12 respondents agreed ($\bar{X}$=3.2) that "accomplishment through a paid occupation is necessary in order to gain in personal understanding and have a positive self-concept (10)." K-7 and 8-9 people were a good deal more neutral with mean scores of 2.6 and 2.5, respectively. This difference may grow out of the fact that the students of 10-12 respondents are much nearer to entry into a paid occupation. Traditionally the 10-12 respondents are more likely to be

male than are the other groups. This factor could also effect the viewpoints expressed.

K-7 respondents disagreed ($\bar{X}$=1.6) with item 29, "Career education cannot be done effectively without the addition of new courses and new facilities to the present educational program." The other groups tended to score more neutrally on the item, but leaning toward disagreement. This difference may grow out of the orientation of each group. The 8-9 and 10-12 respondents tend to be more subject-matter oriented and think in terms of new courses more readily.

K-7 respondents also registered disagreement with item 34 ($\bar{X}$=2.0), regarding whether career education is asking teachers to take on the role of a counselor. The 8-9 respondents tended to be neutral or leaning toward agreement ($\bar{X}$=2.6).

The 8-9 respondents disagreed ($\bar{X}$=2.0) that job placement is a school responsibility (38). K-7 respondents registered a neutral score ($\bar{X}$=2.5) and high school teachers leaned only slightly to agreement ($\bar{X}$=2.6).

All respondents disagreed with the idea of career education being a fad. The 10-12 group was slightly less emphatic in their disagreement, however.

Effectiveness of School Programs

Respondents were also asked to rate the effectiveness of their own schools' programs in achieving nine particular objectives. They rated achievement of the objectives on a four point scale from 1 = "Not Effective" to 4 = "Very Effective," with an extra category: "Not applicable for students in this school." Means were computed for each position on each item, excluding any responses of "Not applicable."

The information provided in Table 21 is for 1979. Comparable data for 1978 were not available.

Table 21. Respondents' Opinion of Effectiveness of Schools' Program by Position

1 = Not Effective	3 = Moderately Effective
2 = Slightly Effective	4 = Very Effective

Statement Our school develops students who are:	Mean Response by Position Principal	Counselor	Teacher
1. Competent in the basic academic skills.	3.9	3.7	3.5
2. Equipped with good work habits.	3.5	3.1	3.3
3. Capable of choosing a personally meaningful set of work values.	3.4	3.4	3.1
4. Equipped with career decision-making skills, job hunting skills, and job getting skills.	3.3	3.3	3.3
5. Equipped with job specific occupational skills and interpersonal skills at a level that will allow them to gain entry into and attain success in the occupational society.	3.3	3.7	3.0
6. Equipped with career decisions based on the widest possible set of data concerning themselves and their educational-vocational opportunities.	3.1	3.4	3.0
7. Aware of means available to them for continuing and adult education once they have left the formal system of schooling.	3.6	3.7	3.2
8. Successful in being placed in a paid occupation or in further education.	3.8	3.3	3.4
9. Successful in understanding the relationship between one's work and one's life style.	3.6	3.7	3.2

Inspection of Table 21 reveals that all means fell between 3.0 and 3.9, indicating a feeling of at least moderately effective to very effective achievement on all objectives by all staff categories. The general feeling appears to be one of success regarding achievement of these objectives.

The highest mean scores for effectiveness were given by principals who rated their schools very effective ($\bar{X}$=3.9) regarding item 1, developing competency in basic academic skills. They also gave a high score ($\bar{X}$=3.8) to the school's success in job or educational placement (8).

Teachers, overall, tended to score their schools a bit less optimistically than did principals and counselors. They recorded the lowest mean scores (3.0 for both items 5 and 6) and did not range as high as did the other group. Teachers considered the schools moderately effective in equipping students with specific entry level skills (5) and in equipping students with broadly based information for career decisions (6), while other principals and counselors rated these categories higher.

Overall, the highest effectiveness ratings went to item 1, development of academic skills. The lowest overall rating was for item 6, development of students equipped with data concerning themselves and their opportunities.

Means of responses regarding opinions of effectiveness of school's programs in achieving the nine objectives were also tabulated by program level: K-7, 8-9, and 10-12 staff members. This information is presented in Table 22.

Inspection of Table 22 reveals that all means fell between 2.8 and 3.7 indicating a sense of moderately effective to very effective achievement on all objectives by staff persons at all levels. As mentioned earlier, the overall opinions reflected a sense of effective achievement.

When considered by level, each group scored similarly. The 8-9 group, overall, tended to score their programs slightly lower than did the others. They also gave the lowest rating ($\bar{X}$=2.8) of any group to an item regarding students being equipped with occupational and interpersonal job entry skills (5).

Table 22. Respondents' Opinion of Effectiveness of Schools' Program by Level

1 = Not Effective	3 = Moderately Effective
2 = Slightly Effective	4 = Very Effective

Statement	Mean Response By Level		
Our school develops students who are:	K-7	8-9	10-12
1. Competent in the basic academic skills.	3.7	3.5	3.6
2. Equipped with good work habits.	3.5	3.1	3.7
3. Capable of choosing a personally meaningful set of work values.	3.1	3.3	3.1
4. Equipped with career decision-making skills, job hunting skills, and job getting skills.	3.2	3.4	3.4
5. Equipped with job specific occupational skills and interpersonal skills at a level that will allow them to gain entry into and attain success in the occupational society.	3.2	2.8	3.3
6. Equipped with career decisions based on the wildest possible set of data concerning themselves and their educational-vocational opportunities.	3.1	3.1	3.1
7. Aware of means available to them for continuing and adult education once they have left the formal system of schooling.	3.5	3.2	3.3
8. Successful in being placed in a paid occupation or in further education.	3.5	3.6	3.3
9. Successful in understanding the relationship between one's work and one's life style.	3.2	3.5	3.4

The highest mean scores ($\bar{X}$=3.9) were given by the K-7 group to the item regarding academic competency (1), and by the 10-12 group to item 2, regarding effectively equipping of students with good work habits. The 10-12 staff who relate to students during the period just prior to job entry felt these students possessed good work habits.

Overall, by position and by level taught, the respondents were very favorable regarding the extent to which the career education student objectives were being met.

Student Career Maturity

As was indicated in the procedures section of the report, two sample groups were selected. A sample of 7th, 9th, and 11th grade students from Bowling Green comprised the Career Education Group of students. A Control Group was obtained from a similar school system from the same region of the state. The control group had not been exposed to career education activities to any great degree. The sample numbers were approximately 75 students per group per grade.

The students' levels of career maturity were measured by the Career Maturity Inventory (CMI). The instrument was also previously described in the PROCEDURES section of the report. Students completed two sections of the CMI (a Competence Test and an Attitude Scale). Five scores were reported for the Competence Test: (1) a self-appraisal score, (2) a knowledge of occupational information score, (3) a goal selection score, (4) a career planning score, and (5) a problem solving score. One score was reported for the Attitude Scale, a measure of the feelings, the subjective reactions, the dispositions that an individual has toward making a career choice and entering the world of work.

A 2 X 2, Sex X Group, Analysis of Variance technique was utilized to test for differences between the career education and non-career education students. The variable Sex was included to ascertain whether career education had any differing effects on boys or girls.

The analysis revealed that there was no interaction between the main effect variables Sex and Group, indicating no differential program effects on either sex. Therefore, differences in scores between males and females and between career education and non-career education students could be analyzed separately. These data appear in Tables 23, 24, and 25 for seventh, ninth, and eleventh grade students respectively. Discussion will center mainly on Group differences, those comprising the last four columns of each table.

Table 23. Analysis of Variance for CMI Scores of Seventh Grade Students (By Sex and By Group)

Variable	SEX				GROUP			
	Males $\bar{X}$	Females $\bar{X}$	F-Value	P	Career $\bar{X}$	Non-Career $\bar{X}$	F-Value	P
Competence Test								
Self-Appraisal	9.45	10.86	6.69	.01*	10.52	9.46	4.06	.04*
Occupational Inf.	11.31	11.78	0.45	.50	12.05	10.69	6.06	.01*
Goal Selection	10.19	10.42	0.06	.81	10.76	9.53	6.17	.01*
Planning	10.55	11.16	0.76	.38	11.24	10.15	3.35	.07
Problem Solving	6.32	7.35	6.39	.01*	6.83	6.76	0.03	.87
Attitude Scale	31.54	31.56	0.02	.88	31.22	32.13	1.40	.24

*$p < .05$ - Indicates significant differences between the group means.

Table 23. Analysis of Variance for Scores of Ninth Grade Students (By Sex and By Group)

Variable	SEX				GROUP			
	Males $\bar{X}$	Females $\bar{X}$	F-Value	P	Career $\bar{X}$	Non-Career $\bar{X}$	F-Value	P
Competence Test								
Self-Appraisal	12.18	13.14	2.98	.09	13.08	12.21	1.94	.17
Occupational Inf.	13.71	15.00	7.69	.01*	15.61	13.22	17.04	.00*
Goal Selection	11.71	13.28	9.21	.00*	13.55	11.48	11.62	.00*
Planning	12.15	13.44	4.54	.04*	13.57	12.03	4.81	.03*
Problem Solving	8.88	10.54	9.08	.00*	10.41	8.96	5.63	.02*
Attitude Scale	33.24	33.54	0.27	.60	34.30	32.73	2.43	.12

*$p < .05$ - Indicates significant differences between the group means,

Table 25. Analysis of Variance for CMI Scores for Eleventh Grade Students (By Sex and By Group)

Variable	SEX				GROUP			
	Males	Females			Career	Non-Career		
	$\bar{X}$	$\bar{X}$	F-Values	P	$\bar{X}$	$\bar{X}$	F-Value	P
Competence Test								
Self-Appraisal	12.40	15.04	18.34	.00*	14.05	13.90	0.06	.80
Occupational Inf.	14.94	16.75	10.78	.00*	15.72	16.31	1.04	.31
Goal Selection	12.38	14.96	15.55	.00*	14.30	13.54	1.49	.23
Planning	13.57	15.42	7.66	.01*	14.74	14.61	0.04	.85
Problem Solving	10.28	12.20	12.83	.00*	11.21	11.63	0.57	.45
Attitude Scale	34.55	34.97	0.09	.77	35.26	34.36	0.90	.34

*$p < .05$

Observation of Table 23 reveals that the career education students scored significantly higher on three of the six career maturity measures. Their average scores were higher for Self-Appraisal (10.52 versus 9.46 for the non-career education group), Occupational Information (12.05 versus 10.69), and Goal Selection (10.76 versus 9.53). Their scores on Planning were also higher, with the difference approaching significance. For seventh graders, the career education group consistently outscored the non-career education students.

Presented in Table 24 are the results of the CMI analysis for ninth grade students. Again, significant differences were observed, with the career education group higher on all six measures, with four of these differences being significant.

Although the career education group of eleventh grade students outscored the non-career education group on four of the six career maturity measures, none of

the differences was significant. This finding was consistent with other career education evaluations involving the CMI. Either the CMI as an instrument no longer provides discriminating data by the eleventh grade, or career education hasn't been sufficiently implemented at the high school level to make a real difference in the CMI measures. Both reasons could be plausible.

Overall, the career education group displayed higher levels of career maturity than did the non-career education students, particularly at grades seven and nine, and for the Competence Test variables. Two competencies, "Occupational Information" and "Goal Selection," were significantly higher for the career group in both the seventh and the ninth grade.

In addition to the group comparisons, the CMI manual was consulted regarding norms by grade. The following summary table (Table 26) depicts the results obtained by the Bowling Green students in relation to instrument norms. A (+) indicates that the norms were exceeded and a (-) indicates that the Bowling Green students failed to reach the average score achieved by the norming groups.

Table 26. Extent to Which Bowling Green Students Exceeded CMI Average Norming Scores by Grade

CMI Variable	Grade 7	Grade 9	Grade 11
Competence Test			
Self-Appraisal	+	+	+
Occupational Information	+	+	+
Goal Selection	+	+	+
Planning	+	+	+
Problem Solving	+	+	+
Attitude Scale	+	+	-

Observation of Table 26 reveals that the Bowling Green students exceeded the norm group for all but one measure, that being the eleventh grade Attitude Scale Score.

The career maturity levels of the Bowling Green students consistently exceeded those achieved by a control group, and, with only one exception, exceeded the established norms of the Career Maturity Inventory. Therefore, it was concluded that the career education program had a positive effect on increasing the students' levels of career maturity, with the implication being that these students then possessed greater job seeking skills as a result of the program.

Career Education Program Assessment (Grade 12)

The entire twelfth grade student body was queried regarding the extent to which they perceived that Bowling Green students have been prepared for the world outside of school, including eventual careers. The Program Assessment Instrument consisted of three parts. Part 1 provided a measure of the extent to which students felt school had helped them regarding career education related aspects of the program. In Part 2, the students indicated their felt needs in relation to career related statements. Part 3 provided the opportunity for open-end responses regarding their experiences in school.

Career Education Instruction

Presented in Table 27 are the student responses relative to the status of school activities (Part 1). Students were presented with a list of career education activities and asked to rate "Yes," "Some," or "No" regarding whether or not they felt that their school's program had provided them with instruction for that activity. Since all students had been provided instructions for most of the 30 activities listed, their responses appeared to be more of a rating of the effectiveness of the program in providing these experiences.

Table 27. Grade Twelve Responses to Career Education Needs Survey (Status of School Activities)

Activity	Response			
	Yes %	Some %	No %	N/R %
1. Have your teachers helped you to identify how family, school, peer groups, community, and work experiences will influence your life-style?	28.8	55.2	16.0	-
2. Have your school experiences aided you to understand that planned priorities and goals are more likely to be attained?	47.6	44.4	8.1	-
3. Has your school helped you to consider information about yourself as it relates to your future educational and occupational plans?	48.4	35.5	15.3	0.8
4. Have your teachers helped you to become aware of your limitations, as well as your strengths, as they relate to your future?	25.6	44.0	29.6	0.8
5. Has your school provided simulated work experiences in order that you might become aware of job skills?	36.3	37.1	25.0	1.6
6. Have your teachers discussed with your class the various careers which are related to the subjects they teach?	36.0	41.6	20.8	1.6
7. Have you been shown how your ability and achievement test results will be helpful to you in your post high school educational and career opportunities?	26.0	35.8	35.8	2.4
8. Have your teachers helped you to know that different occupations require different types of educational preparation?	44.0	38.4	13.6	4.0
9. Do you know the difference between the words "career" and "occupation"?	72.4	13.8	9.8	4.1

Table 27. (Continued)

Activity	Response			
	Yes %	Some %	No %	N/R %
10. Have you learned about various job clusters?	16.1	41.1	37.9	4.8
11. Have you had the opportunity to explore the advantages and disadvantages of several career areas?	33.1	33.9	25.8	7.3
12. Has your school helped you to become familiar with employment possibilities in your community and surrounding areas?	16.9	39.5	35.5	8.1
13. Has your school provided you with opportunities to take field trips and observe others working in jobs that interest you?	22.4	34.4	34.4	8.8
14. Does your school have books, films, filmstrips, catalogs, and other information available for you to use to study about various careers?	66.9	19.4	4.8	8.9
15. Have your teachers invited people to come to your classes to talk about their work and the requirements for their jobs?	36.8	36.8	17.6	8.8
16. Has school helped you to understand that you are responsible for the outcomes of your decisions?	46.0	35.5	8.1	10.5
17. Has your school provided you the opportunity to make realistic decisions and plans?	23.4	54.8	12.1	9.7
18. Have you been given opportunities in school to relate your hobbies or out-of-school activities to your school curriculum?	21.6	37.6	29.6	11.2
19. Has your school helped you understand that a job well done is rewarded by self-satisfaction and the recognition of others?	39.2	32.8	16.0	12.0

Table 27. (Continued)

Activity	Response			
	Yes %	Some %	No %	N/R %
20. Has your school helped you become aware of the many constructive or productive ways you may use your leisure time?	15.2	44.0	28.8	12.0
21. Has your school helped you to become familiar with the use of basic tools, equipment, and materials associated with the world of work?	29.8	41.1	16.9	12.1
22. Does your school help you in planning and preparing for a "next step" beyond high school, in either employment or further education?	30.4	42.4	14.4	12.8
23. Have your school experiences helped you understand your interests, aptitudes, and achievement necessary to developing your career goals?	24.2	44.4	17.7	13.7
24. Have your educational experiences helped you to understand the relationships between levels of education and employment?	24.0	38.4	20.8	16.8
25. Have your course selections in high school influenced your tentative career plans?	25.0	37.1	21.0	16.9
26. Has your school provided you with access to information you want and need about post high school educational and career opportunities?	31.2	32.0	20.0	16.8
27. Has your school provided information about employer expectations?	22.6	33.9	25.8	17.7
28. Has your school provided you with the opportunity to have simulated work experiences related to your tentative career plans?	16.8	36.8	28.0	18.4
29. Have you been provided experiences in preparing job applications and resumes related to employment?	31.5	25.8	24.2	18.5
30. Have you had practical experiences in the use of social and communicative skills necessary for employment interviews?	16.0	38.4	26.4	19.2

Analysis of the data reveals that several students marked the "No" response; over 30 percent in some instances. However, analysis of state-wide assessment data on the same questionnaire revealed a much higher "No" response for 25 of the 30 items. The Bowling Green students, in other words were much more positive in their responses than were those from the state-wide sample.

Several activity items stand-out as being very positive. Among these are item 2. dealing with planning and goal setting; item 9., knowledge of the difference between career and occupation; item 14., regarding availability of career information; and item 17., concerning school assistance in making realistic decisions and plans.

Those areas rated with higher percentages of "No's" indicate a need for the school to further assess its program to ascertain the extent to which that activity is stressed and the extent to which it should be stressed. High percentages of "No" responses are not an indictment against the program if that activity were not among the program objectives. Such areas include:

4. Have your teachers helped you to become aware of your limitations, as well as your strengths, as they relate to your future?
7. Have you been shown how your ability and achievement test results will be helpful to you in your post high school educational and career opportunities?
10. Have you learned about various job clusters?
12. Has your school helped you to become familiar with employment possibilities in your community and surrounding areas?
13. Has your school provided you with opportunities to take field trips and observe others working in jobs that interest you?
18. Have you been given opportunities in school to relate your hobbies or out-of-school activities to your school curriculum?

20. Has your school helped you become aware of the many constructive or productive ways you may use your leisure time?

28. Has your school provided you with the opportunity to have simulated work experiences related to your tentative career plans?

30. Have you had practical experiences in the use of social and communicative skills necessary for employment interviews?

It was interesting to note that a change in student opinion apparently takes place as they near high school graduation. The question appears to center around, "how much of an activity is enough?" The realization of the choices necessary in the transition from school hits home to the student in a very real way as they near graduation. This same situation reveals itself in analysis of the yellow Career Development Record on which the student's tentative career choices were recorded each year. Many more say "I don't know" when they are seniors. Prior to that time, they nearly always listed a tentative career choice.

Student Needs

The twelfth grade students were also asked to respond to a series of statements regarding the degree to which they felt that they and other students from Bowling Green needed help (Part 2.). These findings appear in Table 28. Response choices included "Great Deal More," "More," "Same Amount," "Less," and "Don't Know." For the entire list of 18 items, Bowling Green students responded with less perceived needs than did the state-wide sample previously discussed.

Areas for which they displayed the most confidence (least help needed) included: (By item)

1. Help in discovering what is important to me.

3. Help in making realistic career plans and taking responsibility for planning a meaningful and satisfying life.

Table 28. Grade Twelve Responses to Career Education Needs Survey (Indicated Needs)

Need	% Response					
	Great Deal More	More	Same Amount	Less	Don't Know	N/R
As a student, I need:						
1. help in discovering what is important to me.	9.6	20.8	30.4	9.6	6.4	24.0
2. opportunities to become self-confident in the things I do and in working with other people.	10.4	22.4	34.4	4.8	4.0	24.0
3. help in making realistic career plans and taking responsibility for planning a meaningful and satisfying life.	9.6	24.0	30.4	10.4	1.6	24.0
4. help in learning human relations skills to get along well with fellow workers, friends, and family members.	10.4	19.2	36.0	8.0	1.6	24.8
5. information about how occupations I might choose would affect my lifestyle.	12.0	24.0	29.6	5.6	4.0	24.8
6. information about how to use available resources to find out about myself and possible career choices. (Examples of resources are: books, counselors, films/filmstrips, resource persons, etc.)	9.6	19.2	27.2	15.2	3.2	25.6
7. help in discovering if I am interested in working primarily with people, ideas, or things.	6.4	24.8	25.6	14.4	3.2	25.6
8. help in matching up my interests and abilities with possible career choice areas.	12.8	20.8	25.6	11.2	4.0	25.6

Table 28. (Continued)

Need	% Response					
	Great Deal More	More	Same Amount	Less	Don't Know	N/R
9. help in choosing school courses that will relate to my tentative choice of career fields.	8.8	25.6	28.8	9.6	1.6	25.6
10. help in understanding the influence of labor, management, government, and society on work.	10.4	18.4	32.8	9.6	3.2	25.6
11. information about what jobs are available now and in the future.	12.0	23.2	28.8	7.2	2.4	26.4
12. information about education and training requirements and opportunities for the types of occupations in which I am interested.	9.6	24.8	31.2	4.8	2.4	27.2
13. information about expectations employers or higher education institutions will have on me.	10.4	16.8	35.2	6.4	3.2	28.0
14. help in planning and preparing for a "next step" beyond high school in either employment or further education.	8.0	19.2	30.4	12.0	1.6	28.8
15. help in developing job finding skills such as writing a resume, filling out application forms, and conducting myself in an interview.	7.2	24.8	28.8	9.6	0.8	28.8
16. help in finding a job while still in high school and/or upon exit from high school.	9.6	15.2	23.2	19.2	3.2	29.6

Table 28. (Continued)

Need	% Response					
	Great Deal More	More	Same Amount	Less	Don't Know	N/R
17. opportunities for work-study, co-op, or part-time work to get on-the-job work experiences and "try out" a particular job in which I am interested.	9.6	15.2	30.4	13.6	1.6	29.6
18. information about post-secondary schools.	5.6	18.4	24.8	15.2	5.6	30.4

6. Information about how to use available resources to find out about myself and possible career choices. (Examples of resources are: books, counselors, films/filmstrips, resource persons, etc.)
7. Help in discovering if I am interested in working primarily with people, ideas, or things.
14. Help in planning and preparing for a "next step" beyond high school in either employment or further education.
15. Help in developing job finding skills such as writing a resume, filling our application forms, and conducting myself in an interview.
16. Help in finding a job while still in high school and/or upon exit from high school.
17. Opportunities for work-study, co-op, or part-time work to get on-the-job work experiences and "try out" a particular job in which I am interested.
18. Information about post-secondary schools.

Considering the areas for which students still felt more need for help, the following were the most prominent:

5. Information about how occupations I might choose would affect my lifestyle.
8. Help in matching up my interests and abilities with possible career choice areas.
9. Help in choosing school courses that will relate to my tentative choice of career fields.
11. Information about what jobs are available now and in the future.
12. Information about education and training requirements and opportunities for the types of occupations in which I am interested.

Overall, the student ratings indicated that they felt that there was a need for more career related instruction, even after their having been involved in the career education program. The fact that their responses indicated less need than state-wide baseline data, but that they still reported needs, speaks to their acceptance of the career education program. They were responsive to it, or they would not be saying that they wanted "More" or a "Great Deal More."

Responses to Open Ended Questions

Students were also provided with the opportunity to respond to a series of open ended questions dealing with their career education experiences. They were asked if they remembered school experiences which they now think assisted them with career planning, and whether they thought Bowling Green students were more or less prepared for the future after high school and why. Although this section of the questionnaire was optimal, over 70 percent of the students responded to the open ended questions.

The vast majority of those responding to this section of the questionnaire did so in a very favorable way. Most could recall activities which they now felt were valuable in assisting them with career choice. Among the more common were:

- Research techniques class
- Having visitors
- Going to see careers on the job
- The health education programs
- Speakers visiting the school
- Horticulture class
- Doing a paper on careers
- Working in advanced biology and chemistry
- Trips

- Talking to guidance counselors about careers
- Vocational education classes

The students also felt that their school had better prepared them for the future after high school than had other high schools. When asked why, few responded, but those that did indicated that their feeling this way was due to having speakers, field trips to the community, help in studying careers, and vocational education classes that they had taken.

Academic Achievement

Since an experimental design was not utilized, changes in measured levels of academic achievement over the period of the career education program cannot be directly attributed to the program. However, analysis of achievement levels over time can lend insight into the possible positive or negative effects of the career education program, since that program represented the major intervention/innovation in the school system during the past eight years.

Several patterns might be hypothesized, including:

1. Maintenance of relatively stable achievement measuring characterizing little or no positive or negative effect.
2. Increases in achievement levels over time (as compared to established norms), indicating only that increases have occurred which might or might not be attributed to the career education program.
3. Decreases in achievement levels over time, indicating only that decreases have occurred which, again, might or might not be attributed to the career education program.

The desired outcome would be condition two, in which academic achievement increased at the same time students were displaying increases in career education related learner outcomes. Second in desirability would be condition one, where career education objectives were reached and those program efforts

did not "hurt" basic academic achievement--a fear sometimes expressed by individuals opposed to career education. Of course, the undesirable outcome would be condition three. In this case, even though decreases would not be directly traceable to the career education program, such decreases could be considered an indictment against career education.

One means of examining outcomes is to compare achievement, for example, of third graders across several years. Figures 1-3 show this comparison of grade equivalents on achievement testing for Bowling Green and for the norm for first, third and seventh grades. The graphics are not repeated for all grades, since the pattern remains basically the same. Having achievement information only for the past few years makes interpretations slightly more difficult; however, the years of 1974, 1975, 1977, 1978, and 1979 are the only ones for which achievement test data were available.

Grade one is included to show scores of entering students, as a comparison. Bowling Green scores were consistently below the norm except for 1978.

Figure 1

Achievement Data - Grade 1

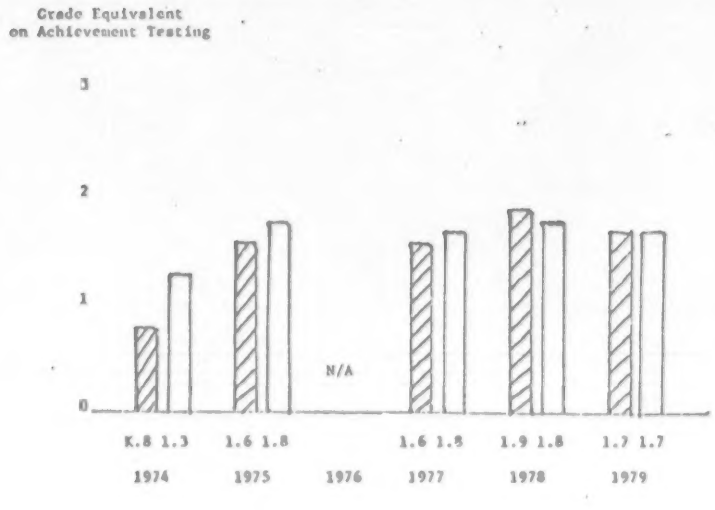


Figure 2

Achievement Data - Grade 3

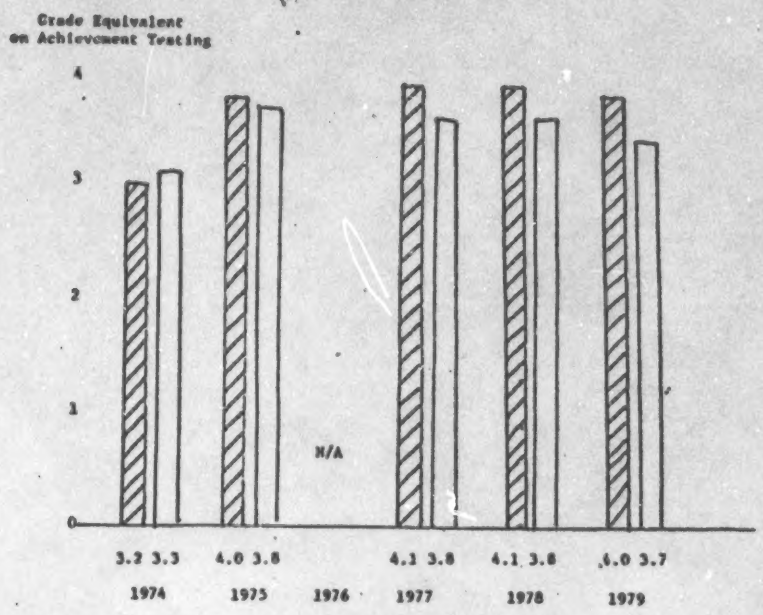
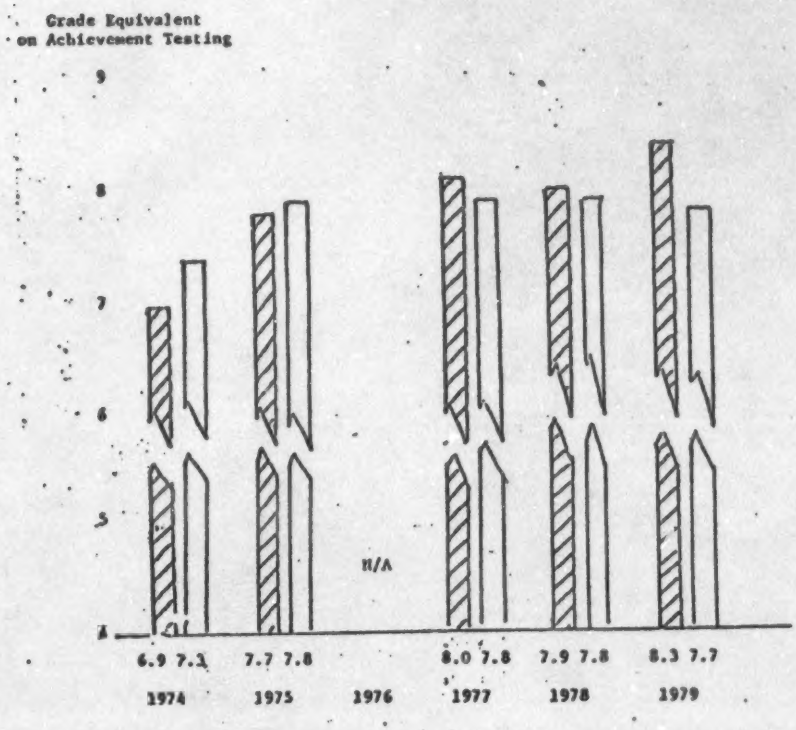


Figure 3

Achievement Data - Grade 7



▨ Bowling Green - test results reported as grade equivalents.

▭ Norm - Test results reported as grade equivalents.

1976 scores not available

In 1978 scores were slightly above the norm. The 1978 first graders were the first group to have had the benefit of district-wide kindergartens, which may have influenced their entering scores.

Grades three and seven were chosen to illustrate what the pattern was in later grades--that pattern being achievement below national norms in 1974, prior to extensive career education programs, and above norms in subsequent years. The increase showed up as the career education program took hold. In other words, increases in achievement have occurred which might or might not be attributed to the career education program.

Figures 4-10 display the achievement trends by individual classes. Classes chosen for illustration are future graduating classes, years 1982 through 1988. In most classes, this information was available for five out of the six years for which data were available.

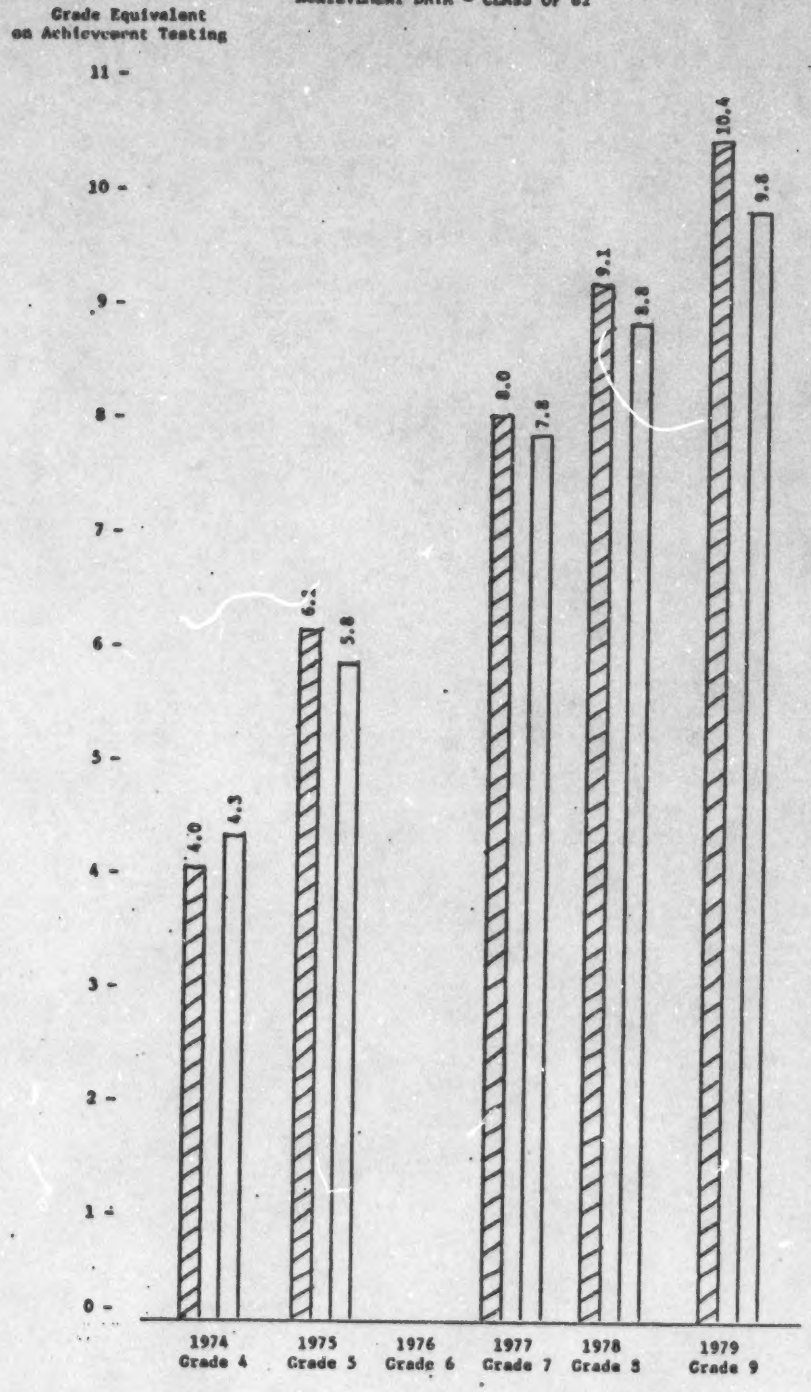
The graphs illustrate a consistent trend. Scores improve from below norms in the early grades to at or above norms in later grades. Scores in 1974 were lower than norms for all grades. In 1975 and subsequent years scores were equal to or exceeded norms. In other words, in years since career education has taken hold, the trend of achievement has been above national norms.

The class of 1985 perhaps provides the truest measure of scores in the project. This group shows the steady improvement in achievement over the six years. These students entered first grade after the career education project had a year or two of implementation, and proceeded through six years to the present. Other later classes have less years of scoring, and earlier classes entered in the beginning or pre-inception days of the project.

All of these classes portray increases which, again, may or may not be attributed to the career education program.

Figure 4

ACHIEVEMENT DATA - CLASS OF 82



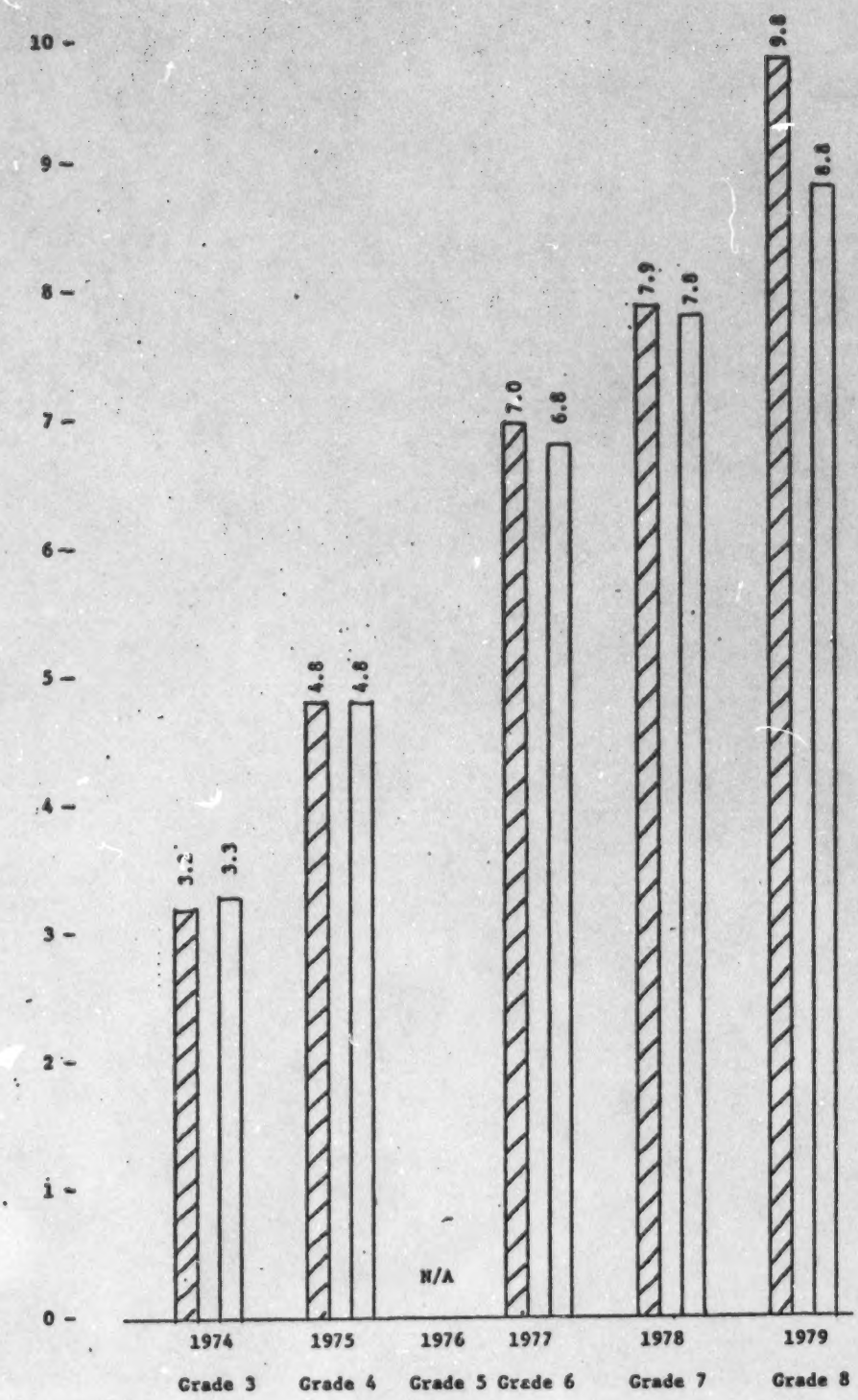
Bowling Green - test results reported as grade equivalents

Norm - test results reported as grade equivalents

1976 scores not available

Figure 5

ACHIEVEMENT DATA - CLASS OF 83



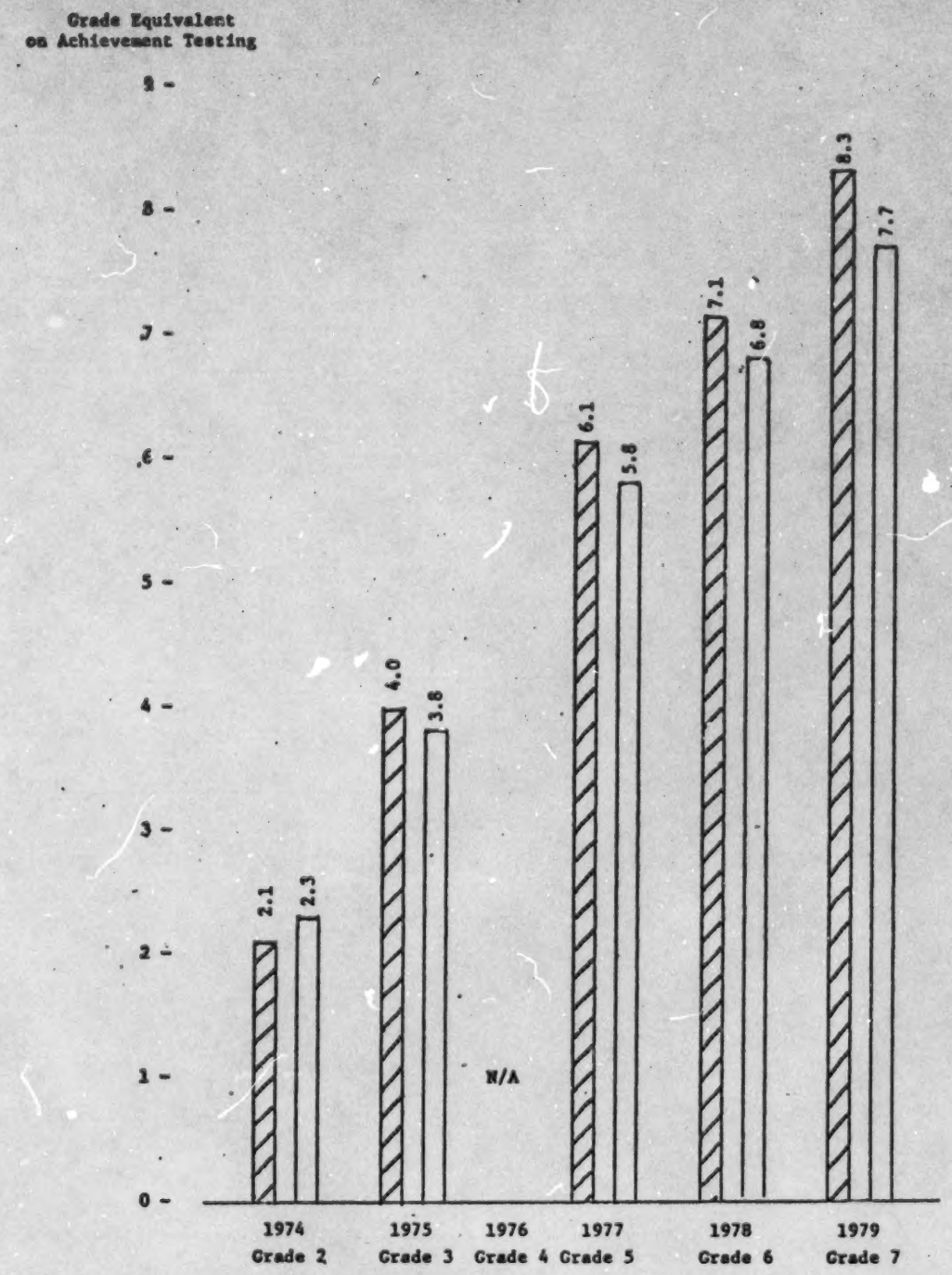
Bowling Green - test results reported as grade equivalents

Norm - test results reported as grade equivalents

1976 scores not available

Figure 6

ACHIEVEMENT DATA - CLASS OF 84



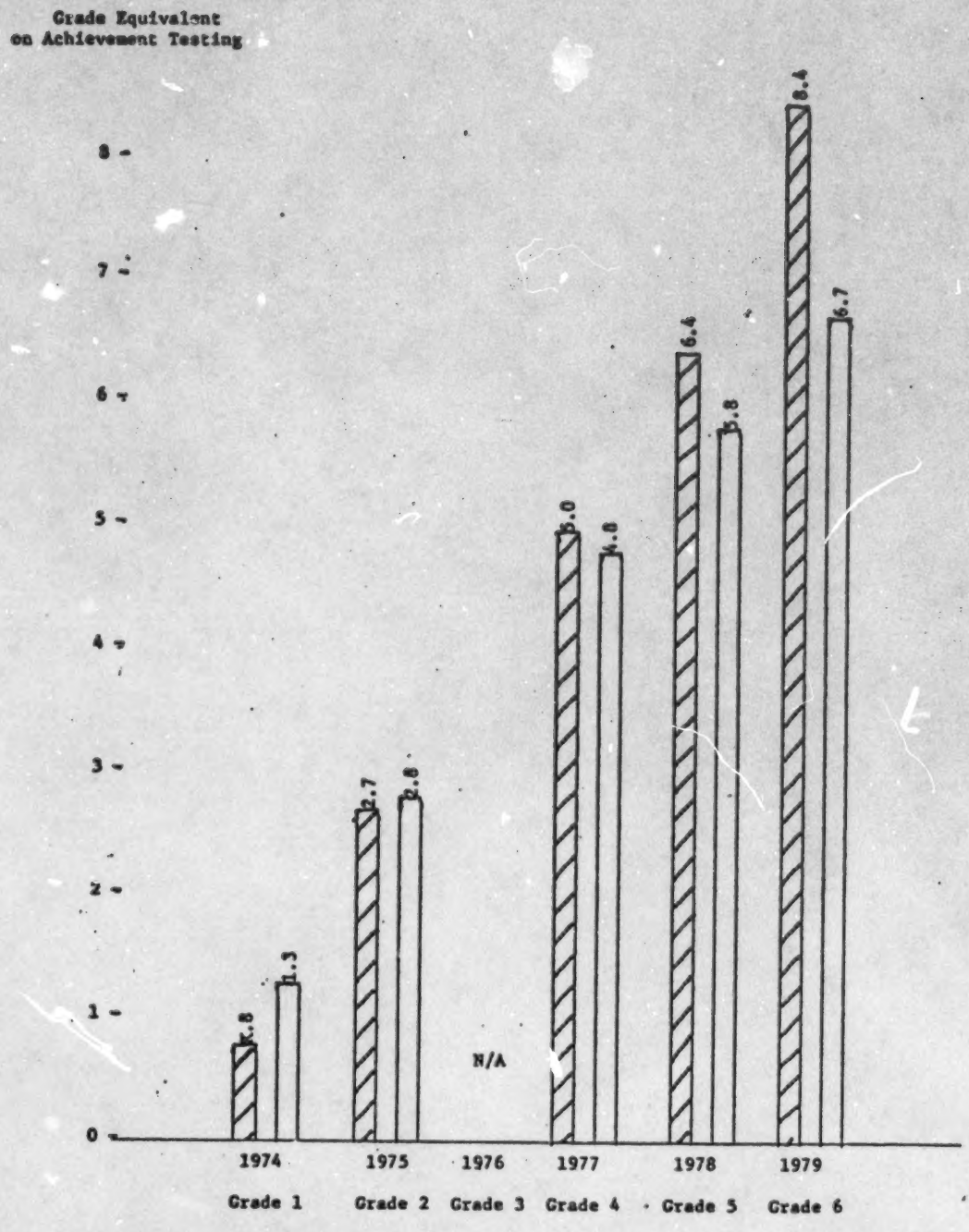
Bowling Green - test results reported as grade equivalents

Norm - test results reported as grade equivalents

1976 scores not available

Figure 7

ACHIEVEMENT DATA - CLASS OF 85



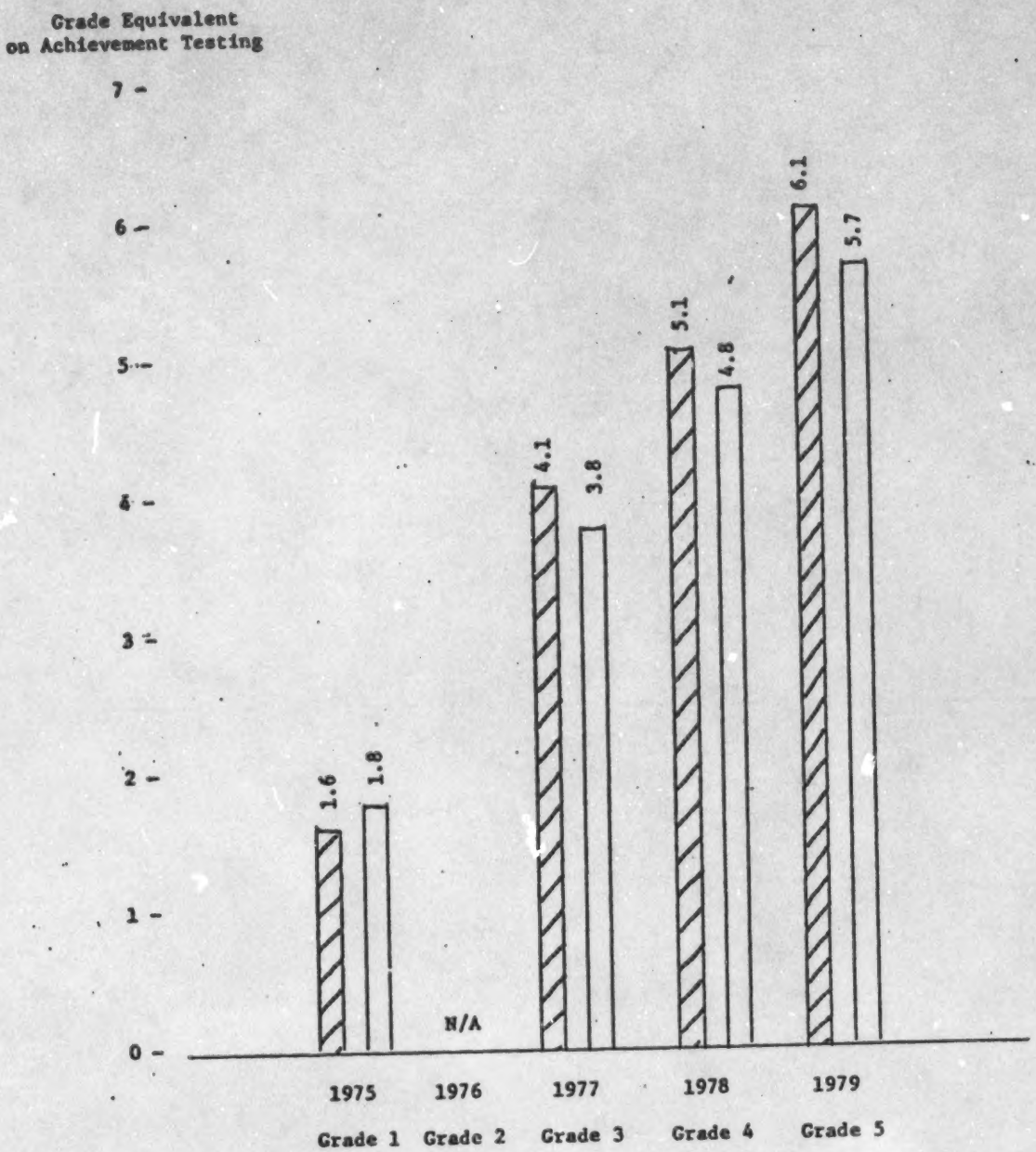
Bowling Green - test results reported as grade equivalents

Norm - test results reported as grade equivalents

1976 scores not available

Figure 8

ACHIEVEMENT DATA - CLASS OF 86



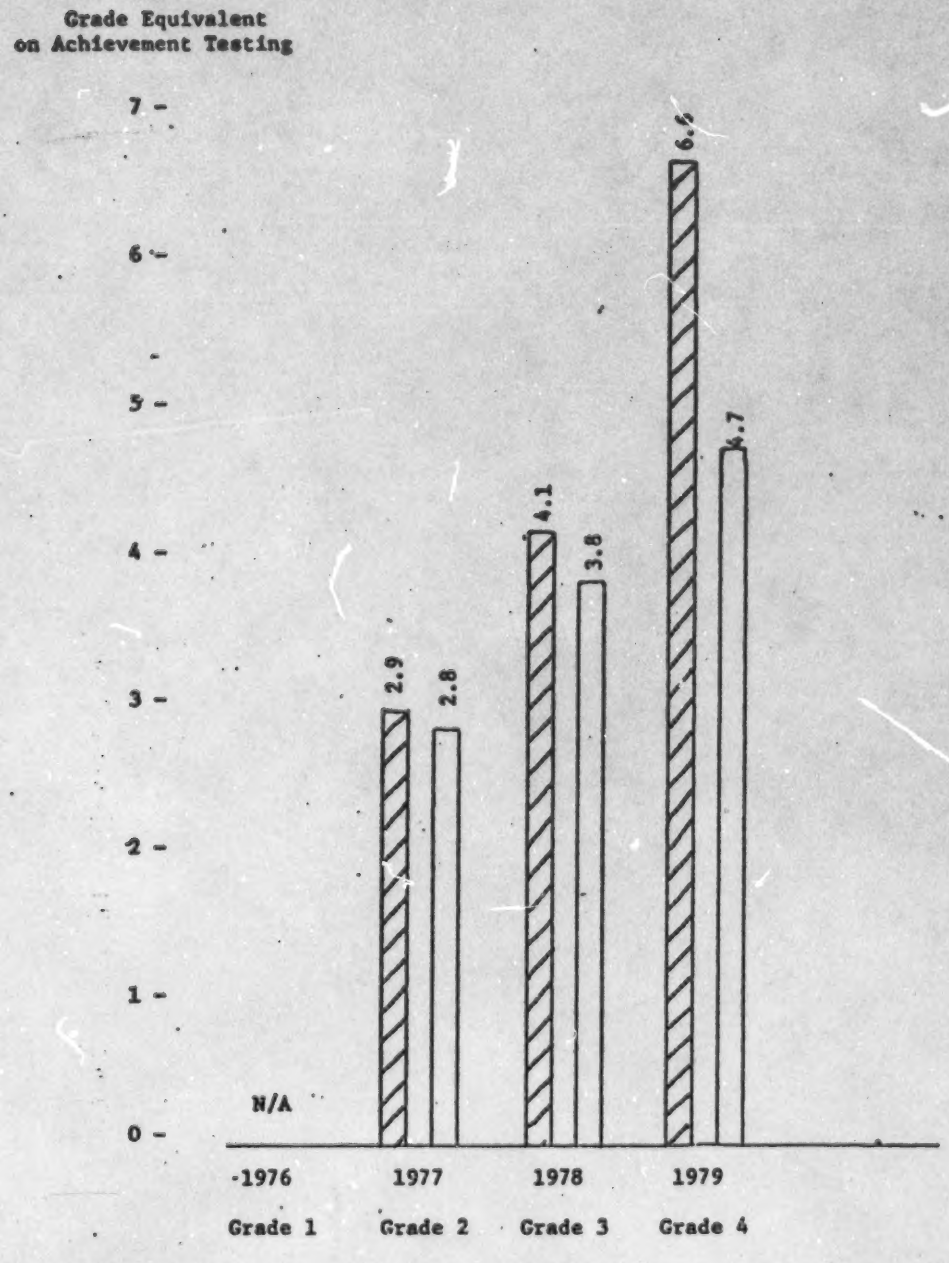
Bowling Green - test results reported as grade equivalents

Norm - test results reported as grade equivalents

1976 scores not available

Figure 9

ACHIEVEMENT DATA - CLASS OF 87



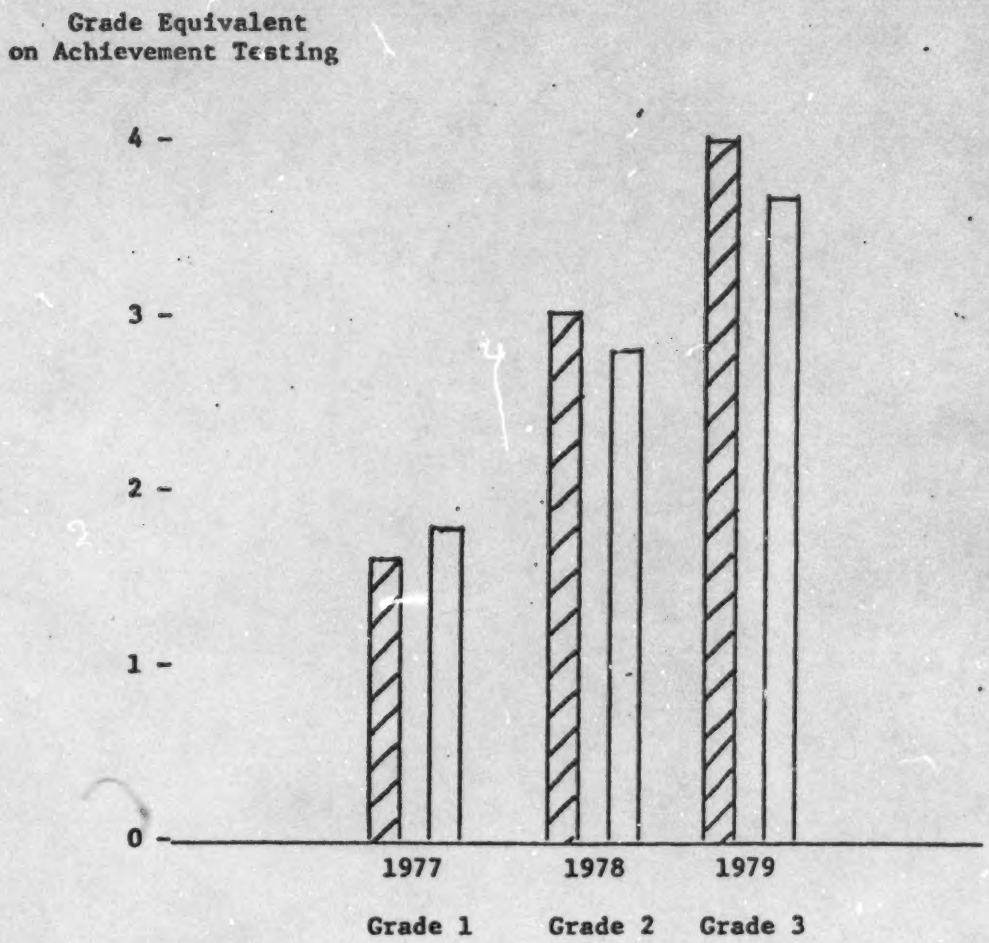
Bowling Green - test results reported as grade equivalents

Norm - test results reported as grade equivalents

1976 scores not available

Figure 10

ACHIEVEMENT DATA - CLASS OF 88



Bowling Green - test results reported as grade equivalents

Norm - test results reported as grade equivalents

1976 scores not available

Career Development Student Record

Over each of the past eight years, students have been asked (as part of the career education program record) to indicate a tentative career choice. These choices were recorded on the "Career Development Student Record." (See Attachment Three). Choices were classified four different ways to facilitate analysis. First, the occupations selected were coded by Dictionary of Occupational Titles (D.O.T.) classifications. These occupational categories are as follows:

0
1 Professional, technical, and managerial occupations

2 Clerical and sales occupations

3 Service occupations

4 Farming, fishery, forestry, and related occupations

5 Processing occupations

6 Machines trades occupations

7 Bench work occupations

8 Structural work occupations

9 Miscellaneous occupations

Second, the occupations were classified according to Holland's Six Personality Types (Isaacson, pp. 33-37, 1973).

R - Realistic

I - Investigative

S - Social

C - Conventional

E - Enterprising

A - Artistic

Third, the students' tentative choices were classified according to their Occupational Cluster (U.S.O.E. 15 Clusters).

Fourth, the choices were analyzed by level. Six levels were included in the classification:

1. Professional and managerial (Higher)
2. Professional and managerial (Regular)
3. Semi-professional and managerial
4. Skilled
5. Semi-skilled
6. Unskilled

Within the limits of the scope of this evaluation, it was not possible to do an in-depth analysis on data of this magnitude. However, a narrative description will be provided relative to each of the above classifications.

Concerning the D.O.T. classification, it was found that a vast majority of the students stated tentative occupational choices which fell into the 0 and 1 occupational categories, professional, technical, and managerial occupations. Looking first at the responses of high school students, grades 10-12, 64 percent of the individual responses were included in this D.O.T. category. Next highest was category 2, clerical and sales, with 12 percent of the responses. Category 3, service occupations, followed with seven percent of the responses. Least often mentioned as a tentative choice were categories five and seven, processing occupations and bench work occupations. Students most often mentioned better known and higher level occupations such as: teacher, veterinarian, doctor, accountant, and lawyer. There appeared to be a good deal of consistency in the student's responses over their high school period.

Next, concerning middle school students, their choices for grades 7-9 also tended to be primarily for professional, technical, and managerial occupations. However, data were available since grade one for the seventh graders, since

grade two for the eighth graders, and since grade three for the ninth graders. In reviewing all years, an interesting trend emerged. For the first three or four years, the occupational choices were more varied and less "common" in terms of the occupational title. By middle school, more of the tentative choices were linked to definite and recognizable job titles such as: teacher, architect, policeman, banker, etc.

Elementary students displayed a choice pattern not unlike Ginzberg's position on life-stages and tentative career choice. Ginzberg hypothesized a fantasy period followed by self-evaluation which would result in more realistic choices. The choices of first and second graders included everything from "bull fighter" to "model" to "sell ice cream," and "deep sea diver." By upper elementary, the choices were again centering on the better known or more common occupations included in the occupational category professional, technical, and managerial.

The personality type associated with each occupation's work environment was also investigated. For high school students, a great many "Investigative" related occupations were identified. Also, prominent were "Enterprising" and "Social." The investigative and social responses were found to relate quite closely to the student's frequent selection of jobs from the professional category, which included doctors, teachers, etc. Approximately 20 percent of the occupations listed fell into the "Realistic" personality type. These were related to those job choices from the D.O.T. categories four and six, farming and machine trades respectively. It was apparent that, as the student neared graduation--grades 11 and 12, the choices for each of these two years more often than not fell into the same personality category.

By junior high, the responses of the students had begun to cluster in the investigative and social areas, but very few enterprising occupations had yet

been listed. Rather, as one traced their choices back to elementary school and also looked at the data from elementary students, early choices were related to the "Realistic" category, this category including jobs which required manipulative skills and use of tools and equipment (mechanical skill and physical movement). Many social occupations (teacher, nurse, etc.) were also present for the early grades.

The third type analysis performed on the listings of tentative career choice was to consider each choice in relation to its level, i.e., high level professional, skilled, or unskilled. A six-level classification was utilized. High school students generally chose occupations which fell into levels two and three, semi-professional and lower level professional. The next highest category was level four, skilled, followed by level one, high level professional and managerial.

Junior high students displayed a similar pattern. Most of their choices coincided with occupations in levels two and three, the lower level professional. However, for this group, a lower percentage chose level four, skilled. As the students proceeded into high school, skilled occupations were chosen more frequently.

A vast majority of the elementary student's choices were related to level two, professional and managerial. Next most frequently mentioned was level four, skilled.

The pattern that emerged was mostly professional, managerial, and skilled at the elementary level; more professional and managerial of a higher level by junior high, with very few choice skilled occupations; followed by a lesser percentage of professional and managerial (although still the number one area picked) and an increase in skilled occupations by senior high school.

The final analysis of career choices was to ascertain the occupational cluster to which the choices were assigned using the U. S. Office of Education's 15 clusters. The cluster to which a majority of high school choices were assigned was "Health," followed by "Business and Office." A large number of high school students indicated choices of doctor, veterinarian, health, physical therapy, and medical technology. Also, many chose business related occupations such as: accounting, secretary, business (general term), sales and management.

Junior high students provided choices in a greater variety of clusters including "Public Service," "Hospitality and Recreation," and "Natural Resources and Environment" (in addition to "Health" and "Business").

Elementary students also displayed more variety in their choice than did secondary students. "Transportation" cluster (pilot, etc.,) was present for elementary students, as was "Construction," and "Fine Arts" (actor, actress). These in addition to "Health," "Business," "Public Service" (policeman, fireman), and "Recreation." Sports participation was also frequently mentioned.

The pattern of clusters and levels of jobs chosen tended to follow a sequence from more variation in more clusters to less variation, with later emphasis on "Health" and "Business" at a professional and/or managerial level.

CHAPTER 4

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Presented in this chapter is a summary of the evaluation efforts designed to assess the effectiveness of the project, "Incremental Improvement in the Bowling Green, Kentucky K-12 Career Education Program," a project conducted through a grant from the U.S. Office of Career Education by the Bowling Green City Schools.

The research design called for a variety of data collection and analysis techniques. A major source of data was the professional staff members of the school. A questionnaire was distributed to a sample of 70 professional staff members. Sixty-two individuals (89 percent) responded with completed instruments. They were asked their perceptions of career education implementation in Bowling Green, including the frequency with which they participated in various activities. They also responded to a series of opinion statements regarding career education and its effects on students.

Student career maturity was also assessed through the use of the Career Maturity Inventory (CMI). Measures from Bowling Green were compared with a non-career education control group and with established CMI norms.

Additional student data were gathered from twelfth grade students and from permanent records. The seniors were questioned relative to their involvement in career education activities and their opinion of the effectiveness of those activities. Their perceptions of program needs were also assessed. Student records were utilized to gather two additional types of student data. These were the student's "Record of Career Development" and school-wide records of academic achievement. The career development record included each student's tentative career choice, by year, for the past seven years. These choices were

analyzed for trends. Academic achievement records were also examined for trends over the period during which the career education program had been in operation.

Summary

Professional Staff Survey

The majority of the respondents were females with more than 10 years experience in education. Most had achieved advanced degrees and held the Masters Degree or above. All principals and counselors were included in the sample. The remainder of the respondents (75 percent) were classroom teachers, a slight majority of whom taught at the K-7 level. Forty-five percent were from the 8-9 and 10-12 level.

When asked questions concerning their perceptions of the status of career education, all respondents felt that career education was being actively implemented in their school (100 percent agreement). Sixty-one of the 62 respondents also indicated a "Good" understanding of career education, and the vast majority felt they were adequately prepared to implement career education. None disagreed with the goals and objectives of career education.

Considerable staff development time had been logged by teachers in Bowling Green. However, they still indicated some need for additional help in "involving parents," in "guidance/counseling techniques," and in "evaluation techniques."

The respondents were presented with a list of 40 activities related to the achievement of career education objectives. Principals responded, on an average, that they participated in these activities once or twice a month. They were further queried regarding whether or not that level of

participation was satisfactory, whether they felt they should be more active, or whether less activity would now be appropriate at this stage of program implementation. Generally, they responded that their present level was desirable. In no instance did they indicate a need for less involvement. On several activities, they indicated need for more involvement, most notably for "teaming with other staff to present career-oriented activities to students," "in providing students with work experiences," and "by involving parents and community people." They also rated these activities on a scale from 1 = low importance to 4 = highly important. Principals rated 38 of the 40 items as important or highly important. The two items rating somewhat lower dealt with individual contact with the student (an area in which principals aren't traditionally active).

The response of counselors were quite similar to those of principals, with position related variations being evidenced. Whereas principals were less active and placed least importance on individual student contact, counselors rated these higher. Conversely, they were less active in conducting follow-up, speaking to community groups about career education, and in evaluating or doing needs assessments. However, they also indicated that they needed to be more involved with these program type activities. They also saw a need for more group guidance activities, although working with individual students on career plans was still considered highly important. Counselors generally saw a need for themselves to be more active, and rated all activities as important or highly important.

Teachers reported most activity in "presenting the relationship between basic subject skills and particular careers." Advising and assisting students relative to careers and career decisions also ranked high. It was

interesting to note that teachers were satisfied with their present activity in these areas and also rated them as highly important. Teachers, however, tended to place less importance on student assessment and on program evaluation activities. Overall, teachers tended to rate the activities slightly lower in importance than did principals or counselors. However, all but one of the 40 activities was rated as important, with the remaining one being rated between "of some importance" and "important."

As a group, elementary teachers were most active and placed the greatest importance on activities which were directly related to the classroom. They considered all activities to be of importance and felt that added activity would be desirable. Considering the fact that, as a group, teachers placed slightly less importance on the activities and the need for additional activity, it would follow that these group ratings must be attributable to the junior high and high school teachers. This was found to be the case, when these data were analyzed. These groups did rate the activities somewhat lower than the elementary group, but their ratings were still quite positive.

The importance and activity of teachers in advising individual students increased substantially for the high school teachers. They reported doing this activity at least every week, felt they should be doing it more, and rated it as highly important. Secondary teachers were least interested in evaluation and needs assessment activities, and in teaming with other school staff to present career education activities.

Staff members, regardless of their position or their level of responsibility, displayed a good overall opinion of career education. Also, since like data were available from the 1978 evaluation, comparisons could be made

across years.

A few striking improvements in staff opinion from 1978 to 1979 included:

1. Principals felt that more students were now leaving schools with effective work habits.
2. Both principals and counselors were more in agreement that the home and family could be involved in career education activities.
3. All groups were in agreement that active participation in a career education program would enhance a teacher's overall teaching effectiveness.
4. All groups were in agreement that career education did not need to be a separate course.
5. They were also in more agreement that it does not take a lot of money to implement career education.
6. The positive effect on basic skills development was indicated more strongly by all groups.
7. The groups were also in more agreement with the role of the school in helping females consider traditionally male careers.
8. By 1979, there was almost no agreement with the statement that "career education is just a fad."
9. Also, the respondents were in more agreement that without career education, students would lack the skills to adapt in today's rapidly changing world.

The last section of the professional staff survey asked the respondents to rate the effectiveness of their school's program. On a four-point scale

from 1 = not effective to 4 = very effective, all groups rated their program to be effective, with means for those opinion statements generally ranging in the mid-threes, a highly positive response for this type scale.

Student Career Maturity

Scores achieved on the Career Maturity Inventory (CMI) were analyzed for a sample of seventh, ninth, and eleventh grade students from Bowling Green. Analysis included comparing these scores to a sample of non-career education students (control group) from a like school district and comparing them with established CMI norms.

A 2x2, Sex by Group, Analysis of Variance statistical procedure was utilized to test the null hypothesis of no difference between the career education and the non-career education groups of students. The variable Sex was included to test for the possibility that career education activities would have more of an effect on one sex than on the other. However, no interaction between the variables occurred. In other words, career education affected the sexes equally regarding their career maturity scores. However, the girls did tend to score higher than the boys, but these differences were found to be occurring naturally and not the result of the career education program.

Considering the scores of the Bowling Green students and the control, non-career education group, several significant differences were found. In all cases, these differences were in favor of the Bowling Green students.

For seventh grade students, three significant differences were observed. The Bowling Green students scored higher for the competence test sections "Self-Appraisal," "Occupational Information," and "Goal Selection." They also recorded higher scores for the subtests "Planning" and "Problem Solving,"

but these differences were not substantial enough to be considered sufficiently greater than could occur by chance.

Ninth grade students from Bowling Green outscored the control groups on four of the six subtests: "Occupational Information," "Goal Selection," "Planning," and "Problem Solving." Again, they were somewhat higher on the remaining two sections, but not significantly higher.

Although the Bowling Green eleventh grade students outscored the non-career education group on four of the six career maturity measures, none of the differences was signficant. This finding is consistent with other career education evaluations conducted by this researcher. Either the CMI no longer provides discriminating data for its career education student outcome measures at this grade level, or career education hasn't been sufficiently implemented at the high school to make a real difference in CMI measures.

A comparison of the scores achieved by the Bowling Green students and established norms resulted in 18 individual comparisons (six subtest measures for each of the three grades). Analysis of these comparisons revealed that the students from Bowling Green had exceeded the CMI norms on 17 of the 18 measures. Only the eleventh grade attitude scale score failed to exceed the average score achieved by the norming group. All other measures exceeded the norm.

The multiple analysis of CMI data, first comparing Bowling Green to a non-career education group of students, then comparing Bowling Green to established norms, was necessary to add additional support for the positive effects of career education on student career maturity.

Program Assessment - Grade 12

Twelfth grade students were asked a series of questions regarding their participation in career education activities, and their perceptions of program needs and accomplishments. Students were generally positive, indicating that school had provided them with career related experiences and activities. They were especially positive regarding the help which had been provided to them in planning and goal setting, in the area of occupational information, and in making realistic decisions and plans. It was interesting to note that these student outcomes also related closely to the CMI measures on which the Bowling Green students outscored the non-career education control group.

Students also responded that they felt their school had not provided them with some other career education activities (in selected instances, up to 30 percent responded "No, I have not been provided this instruction"). However, analysis of state-wide assessment data on the same questionnaire revealed a much higher "No" response on those same items. In other words, the Bowling Green students were more positive in their responses than were those from the state-wide sample. These areas of lower responses included such activities/instruction as: becoming aware of both one's strengths and weaknesses, using test results in career educational planning, becoming aware of employment possibilities, taking field trips, and using simulated work experiences and/or practical experiences to aid in planning and entering work.

Student needs were also ascertained. Responses generally were supportive of the school; however, students indicated additional needs in a number of areas, including: information about how job affects lifestyle, help in matching interests and abilities with possible career areas, help in choosing

school courses that will relate to tentative career fields, information about what jobs are available now and in the future, and information about education and training requirements/opportunities for the types of occupations in which they are interested.

All of the above concerns are highly related to the position of transition in which those twelfth grade students found themselves at the time these data were collected, spring of their senior year in high school.

Overall, the student ratings indicated that they felt that there was a need for more career-related instruction, even after their having been involved in the career education program for as long as they had. The fact that their responses indicated less need than the state-wide baseline data, but that they still reported additional needs, speak to their acceptance of the career education program. They were receptive to the program, or they probably would not be saying that they wanted "More" or a "Great Deal More" of such activities or instruction.

Academic Achievement

Since an experimental design was not utilized, changes in measured levels of academic achievement could not be directly attributed to the career education program. However, analysis of such data over time could lend insight into possible positive or negative effects due to career education, since that program represented a major intervention in the school system.

Achievement test data were found to be available for grades one through eight since 1974, with the exception of no data available for 1976. To ascertain a base line relative to school entrance, first grade scores were compared to established norms for each year. It was concluded from this

analysis that the Bowling Green students tested slightly below the established norms when entering school at grade one (1974-79). An additional analysis was conducted on 1974 data to ascertain whether at that time, near the beginning of the career education program, students from grades two through eight were testing at, above, or below the norm. This analysis revealed that, in 1974, all grades were slightly below the norm.

Next, analysis was conducted across years, following the same grade. The results were consistent. In 1974, the grades were slightly below norm. By 1976, the gap between the grade average and the norm had closed or disappeared, and by 1977 (and on), the Bowling Green students were exceeding established test norms.

Whether these increases in tested academic achievement are directly attributable to the career education program, is speculative. However, the fact remains that the various grades were below established norms at the start of the program, narrowed the extent of differences, and have now proceeded to exceed the norms. At a minimum, the findings are clear; career education activities did not "hurt" student academic achievement.

Conclusions and Recommendations

Based on the analysis of the data collected for this study, it was concluded that the Bowling Green Career Education Project had achieved success, success as indicated by student outcome measures and success as revealed by data collected from principals, counselors, and teachers.

The professional staff members were unanimous in their opinion that career education was being actively implemented in Bowling Green. They also displayed agreement with the goals and objectives and further agreed that participation in the program had increased their overall teaching effectiveness.

Student outcome measures were also positive and supportive. The career maturity levels of students were higher than those of a control group of students, and also exceeded established norms. Academic achievement levels also increased during the project period.

Based on the findings of this evaluation, the following recommendations are presented for consideration:

1. Staff members reported extensive inservice involvement. However, a lesser amount of involvement was reported for staff development activities in the area of involving students, in guidance and counseling techniques, and in evaluation techniques. In addition, these areas were identified as topics for additional inservice. Therefore, it is recommended that staff inservice activities for FY 1980 concentrate on these topics, showing their relationship and importance to career education learner outcomes.
2. Principals were generally very supportive of career education. Given the influence which principals exert on the direction of their school's program, continued effort (in the light of reduced staffing and funding) needs to be expended to maintain this commitment, including the provision of time for staff development activities.
3. Principals also revealed a need to be more active in several areas, including involvement in curriculum development for career education, in involving parents and community, and in guidance activities. These concerns should be addressed in next year's program.

4. Counselors reported the highest support level for career education. They also reported least activity in selling the program outside the school and in being involved in program type activities within the school, i.e., their activity was essentially direct student contact rather than program planning, development, and implementation activities. Counselors must assume a leadership role in career education in addition to their direct contact with students. If it is not present, a guidance program should be adopted which includes objectives for and specifies their role in career education/career guidance. The guidance component must be viewed as an integral part of the total educational program, not as an "add-on" service.
5. Additionally (concerning their reported lack of activity outside the school), counselors can play a key role in developing and maintaining contacts with the business/labor/industrial community, including placement of students into paid or unpaid work experiences, and placement on jobs or in postsecondary educational institutions. The latter would involve an expanded guidance effort and one in which the guidance staff would, by necessity, spend time away from their desks and in the community.
6. Teachers at the elementary level reported the most activity and the most support for career education. Therefore, efforts should be continued to assist junior and senior high teachers in implementing career education. Student outcome objectives need to be accepted and adopted by the administration. These

objectives, in turn, should be reflected in teacher activities, particularly since high school teachers reported less felt need for increased activity.

7. Teachers were least active in teaming with other staff members and/or guidance counselors to present career oriented activities to students. They also reported a need for increased involvement with parents. These concerns should be investigated with teachers in an effort to increase program effectiveness.

8. All groups of professional staff members surveyed reported little interest in conducting needs assessments activities, in conducting program evaluation, or in doing student follow-up. These activities need to be considered in relation to their importance to program planning and improvement.

9. Twelfth grade students responded positively regarding the career related help which has been provided them by the school, especially in the areas of planning and goal setting, occupational information, and in making realistic decisions and plans. Students also scored high on these same career maturity competencies as measured by the CMI. However, seniors provided lower ratings for activities such as utilization of test and inventory results to assist in career planning, being aware of employment possibilities, and using simulated work and/or practical experiences to aid in career planning. These areas of lower ratings should be investigated in relation to program objectives.

10. Even with benefit of a career education program, students in their senior year displayed much more uncertainity than did

tenth or eleventh grade high school students. This was evidenced both from the 12th grade questionnaire and from analysis of their tentative career choices on the Career Development Student Record. They indicated needs such as matching interests and abilities with possible career, more information about jobs available now and in the future, and information about education and training requirements/opportunities. On the Career Development Student Record, twelfth graders provided more "uncertain" choices than did any other group. The uncertainity associated with matriculation needs to be recognized and activities developed to assist in the transition from high school.

11. Professional staff members displayed greater agreement in 1979, versus the 1978 evaluation, that helping females consider non-traditional careers was a role of the school. It was concluded that the program efforts in 1978-79 were effective in increasing this consciousness, and efforts should be expanded in next year's program.

12. The CMI scores of eleventh grade students, although surpassing established norms, failed to be significantly higher than those recorded by the control group of non-career education students. It was concluded that either the CMI no longer provided discriminating data at that grade level, or career education hadn't been adequately implemented in the high school to make a real difference on the CMI measures. Both possibilities should be investigated--the program and indices of program success.

13. Analysis of the Student Career Development Record revealed tentative occupational choices which clustered in Health and Business at the professional, technical, and managerial levels. The question remains, "do students actually enter these occupations?" Follow-up activities should be initiated to ascertain the relationship between career choice and actual job placement. Also, renewed efforts should be made to increase student options in light of the opportunities available to them.

14. The tentative career choices expressed by the students followed a pattern not unlike that hypothesized by Ginzberg (Osipow, 1973). That pattern included varied choices characterized by fantasy, followed by fewer and more realistic choices. However, it appeared that the tentative choices at the high school level might be overly restrictive and limited in terms of the clusters and levels represented. The career education objectives and learner outcomes related to exploration and choice should be re-examined to ascertain whether sufficient emphasis is being placed on the development and investigation of career options.

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ATTACHMENT 1

CAREER EDUCATION EVALUATION FORM

Professional Staff Survey

ATTACHMENT 2

CAREER EDUCATION PROGRAM ASSESSMENT

Grade 12

CAREER EDUCATION PROGRAM ASSESSMENT

Bowling Green High School
Grade 12

BACKGROUND: Your school needs your help in regard to its Career Education efforts. They want to know to what extent students have been prepared for the world outside of school, including eventual careers. Career Education combines the efforts of your school, home, and community so you can learn as much as possible about yourself and the world of work.

DIRECTIONS: Respond to the following set of questions on the answer sheet which is provided. Use a soft, No. 2 pencil.

1. Write your name in the boxes provided. You need not darken the corresponding letters.
2. Darken the circle indicating your sex.
3. In the first four (4) spaces under SPECIAL CODES, write the number 1201.
4. Turn your answer sheet to Question 1. Darken the circle which corresponds to the answer you select.
5. Continue until you complete all questions. There are no right or wrong answers. Just mark what you think or feel.

SECTION 1. Mark what you think, with a 1 for yes, a 2 for some, or a 3 for no.

yes 1 some 2 no 3 — 1. Have your teachers helped you to identify how family, school, peer groups, community, and work experiences will influence your life-style.

yes 1 some 2 no 3 — 2. Have your school experiences aided you to understand that planned priorities and goals are more likely to be attained?

yes 1 some 2 no 3 — 3. Has your school helped you to consider information about yourself as it relates to your future educational and occupational plans?

yes 1 some 2 no 3 — 4. Have your teachers helped you to become aware of your limitations, as well as your strengths, as they relate to your future?

yes 1 some 2 no 3 — 5. Has your school provided simulated work experiences in order that you might become aware of job skills?

yes 1 some 2 no 3 — 6. Have your teachers discussed with your class the various careers which are related to the subjects they teach?

yes 1 some 2 no 3 — 7. Have you been shown how your ability and achievement test results will be helpful to you in your post high school educational and career opportunities?

yes 1 some 2 no 3 — 8. Have your teachers helped you to know that different occupations require different types of educational preparation?

yes 1 some 2 no 3 — 9. Do you know the difference between the words "career" and "occupation"?

yes 1 some 2 no 3 — 10. Have you learned about various job clusters?

yes 1 some 2 no 3 — 11. Have you had the opportunity to explore the advantages and disadvantages of several career areas?

yes	some	no		
1	2	3	12.	Has your school helped you to become familiar with employment possibilities in your community and surrounding areas?
1	2	3	13.	Has your school provided you with opportunities to take field trips and observe others working in jobs that interest you.
1	2	3	14.	Does your school have books, films, filmstrips, catalogs, and other information available for you to use to study about various careers?
1	2	3	15.	Have your teachers invited people to come to your classes to talk about their work and the requirements for their jobs?
1	2	3	16.	Has school helped you to understand that you are responsible for the outcomes of your decisions?
1	2	3	17.	Has your school provided you the opportunity to make realistic decisions and plans?
1	2	3	18.	Have you been given opportunities in school to relate your hobbies or out-of-school activities to your school curriculum?
1	2	3	19.	Has your school helped you understand that a job well done is rewarded by self-satisfaction and the recognition of others?
1	2	3	20.	Has your school helped you become aware of the many constructive or productive ways you may use your leisure time?
1	2	3	21.	Has your school helped you to become familiar with the use of basic tools, equipment, and materials associated with the world of work?
1	2	3	22.	Does your school help you in planning and preparing for a "next step" beyond high school, in either employment or further education?
1	2	3	23.	Have your school experiences helped you understand your interests, aptitudes, and achievement necessary to developing your career goals?
1	2	3	24.	Have your educational experiences helped you to understand the relationships between levels of education and employment?
1	2	3	25.	Have your course selections in high school influenced your tentative career plans?
1	2	3	26.	Has your school provided you with access to information you want and need about post high school educational and career opportunities?
1	2	3	27.	Has your school provided information about employer expectations?
1	2	3	28.	Has your school provided you with the opportunity to have simulated work experiences related to your tentative career plans?
1	2	3	29.	Have you been provided experiences in preparing job applications and resumes related to employment
1	2	3	30.	Have you had practical experiences in the use of social and communicative skills necessary for employment interviews?

SECTION 2. Indicate your felt needs in response to the following items.

Your school has been involved in Career Education activities for some time. However, the amount of emphasis which has been placed on the following areas might be OK (mark Same Amount); too much (mark Less); or not enough (Mark More or Great Deal More).

Mark the rating which best describes the degree to which you feel that you and other students from Bowling Green now need help regarding each statement.

● I need:	Great deal more	More	Same amount	Less	Don't know
31. help in discovering what is important to me.	1	2	3	4	5
32. opportunities to become self-confident in the things I do and in working with other people.	1	2	3	4	5
33. help in making realistic career plans and taking responsibility for planning a meaningful and satisfying life.	1	2	3	4	5
34. help in learning human relations skills to get along well with fellow workers, friends, and family members.	1	2	3	4	5
35. information about how occupations I might choose would affect my lifestyle.	1	2	3	4	5
36. information about how to use available resources to find out about myself and possible career choices. (Examples of resources are: books, counselors, films/filmstrips, resource persons, etc.)	1	2	3	4	5
37. help in discovering if I am interested in working primarily with people, ideas, or things.	1	2	3	4	5
38. help in matching up my interests and abilities with possible career choice areas.	1	2	3	4	5
39. help in choosing high school or college courses that will relate to my tentative choice of career fields.	1	2	3	4	5
40. help in understanding the influence of labor, management, government, and society on work.	1	2	3	4	5
41. information about what jobs are available now and in the future.	1	2	3	4	5
42. information about education and training requirements and opportunities for the types of occupations in which I am interested.	1	2	3	4	5
43. information about expectations employers or higher education institutions will have on me.	1	2	3	4	5

I need:	Great deal more	More	Same amount	Less	Don't know
44. help in planning and preparing for a "next step" beyond high school in either employment or further education.	1	2	3	4	5
45. help in developing job finding skills such as writing a resume, filling out application forms, and conducting myself in an interview.	1	2	3	4	5
46. help in finding a job while still in high school and/or upon exit from high school.	1	2	3	4	5
47. opportunities for work-study, co-op, or part-time work to get on-the-job work experiences and "try out" a particular job in which I am interested.	1	2	3	4	5
48. information about post-secondary schools.	1	2	3	4	5

49. Have you decided on a tentative career choice?
    1. Yes
    2. No

50. How sure are you of your career choice?
    1. Haven't made a choice
    2. Quite unsure
    3. Unsure
    4. Somewhat sure
    5. Very sure

51. When did you arrive at this career choice?
    1. Haven't made a choice
    2. During the last 3 months
    3. Three to six months ago
    4. In the 10th grade
    5. In the 9th grade or earlier

Please continue by answering the questions on the following sheet. Be brief, but to the point. Put your name at the top of the sheet in case that section gets separated from your other answer sheet.

_____
(Name)

52. What grades have you attended Bowling Green City Schools? (Check all that apply)

_____ 7	_____ 10
_____ 8	_____ 11
_____ 9	_____ 12

53. What school experiences can you remember which you <u>now</u> think assisted you with your career planning?

54. When considering Bowling Green in comparison to other high schools you know, has your school been more or less effective in preparing you for your future after high school?

_____ More
_____ Less

How?

55. Are there any <u>one</u> or <u>two</u> specific Career Education activities which you remember as being really good and/or effective? Please describe:

Thank you for responding.

ATTACHMENT 3

CAREER DEVELOPMENT STUDENT RECORD

Bowling Green City Schools

CAREER DEVELOPMENT STUDENT RECORD
(please print or type, see other side)

NAME _____ DATE OF BIRTH _____

SOCIAL SECURITY NO. _____

Grade Level	School Year	Tenative Career Choice (write UN if unknown)	Ability Level* (Stanine)	Achievement Level* (Stanine)
K				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

*Use Stanine scores if available, otherwise leave blank.

Placement upon leaving school (after age 16) check areas applicable :

To be completed by
High School Guidance Office
or Placement Official

WORK EXPERIENCES

____ Employed in full time job ____ Unplaced

____ Employed in part time job ____ Unknown

____ Entered Technical Training Program ____ Married

____ Entered Baccalaureate Program ____ Other _____

_____

_____

_____

OCCUPATIONAL CLUSTERS STUDIED

Please Check Code as Follows :

✓ = Awareness (1 through 12)

X = Practical Arts Program (Jr. High)

✓✓ =Preparation specific skills (High School)

Clusters Grade Level :	K	1	2	3	4	5	6	7	8	9	10*	11*	12*
Public Service													
Health													
Consumer Homemaking and Related Occupations													
Agri-Business and Natural Resources													
Hospitality and Recreation													
Personal Services													
Construction													
Manufacturing													
Communication and Media													
Transportation													
Marketing and Distribution													
Environmental Control													
Business and Office													
Fine Arts and Humanities													
Marine Science													

*When chart above is not applicable for grades 10, 11, and 12, list Preparatory Program (this includes pre-professional) separately. When applicable, list Major Course of Study.

Grade	Preparatory Program	Major Course of Study
10		
11		
12		

CAREER EDUCATION EVALUATION FORM

Professional Staff Survey

Bowling Green City Schools

April, 1979

RECEIVED
OCT 18 1979/OCE Program Review

PROJECT PEOPLE

CAREER EDUCATION
BOWLING GREEN CITY SCHOOLS

Judy White, Coordinator

Bowling Green High School
1801 Rockingham Lane
Bowling Green, KY 42101
502-842-3323

MEMORANDUM

TO: Professional Personnel, Bowling Green City Schools

FROM: Judy White, Coordinator of Career Education

SUBJECT: 1979 Career Education Evaluation

This year we will be completing an evaluation instrument very similar to the forms we completed last year for the National Testing Service. Last year's forms were a little longer and some of the questions weren't really applicable to us. So, this year we revised the questionnaires, making them more useable for our school system.

Please complete the questionnaire at your earliest convenience. Teachers and counselors should return them to their principal, who will forward them to me. Since you are part of a sample of staff members, it is quite important that we have 100% response.

The instrument is pretty much self-explanatory; however, you might keep the following points in mind when responding. First, there are no right or wrong answers on the attitude section (Section 3.). Second, all data will be treated in strictest confidence. The findings will be reported for totals only, not by individuals. Third, there is no special answer sheet; mark all your responses on the questionnaire itself.

We very much appreciate your cooperation in this evaluation effort. We know we are taking valuable time from your schedule, but feel it is necessary for our school's program.

Thanks for your help.

Part 1: INFORMATION FORM

1. Years experience in education (count this year)

_____ 5 or less
_____ 6 - 10
_____ 11 - 15
_____ Over 15

2. Highest Degree Held:

_____ Bachelors
_____ Masters
_____ Rank I/Specialist
_____ Other (Write in) _____

3. Sex:

_____ Male
_____ Female

4. Level of Primary Responsibility:

_____ K - 7
_____ 8 - 9
_____ 10 - 12

5. Which one term best describes your area of responsibility?

_____ Principal
_____ Counselor

Teacher of: (check one below)

_____ Elementary, Self contained
_____ Math/Arithmetic
_____ Natural Sciences/Life Sciences
_____ Social Sciences/Social Studies/History
_____ Language Arts/English
_____ Fine Arts/Music
_____ Other _____
(write in)

6. In how many occupations other than the field of education have you been employed (excluding summer and or part-time positions)?

_____ none
_____ one
_____ two
_____ three
_____ four or more

7. Which one of the following statements best describes the current position of your school on the career education concept?

_____ The concept of career education is being actively implemented.
_____ The concept has been approved by the school, but has not yet been implemented.
_____ The concept is under discussion, but no formal position has been taken by the school.

8. Which one of the following statements best describes your own understanding of the concept of career education?

_____ I feel I have a good understanding of the concept of career education.
_____ I feel I have only a partial understanding of the concept.
_____ I feel I do not understand the career education concept.

9. Which one of the following best describes how adequately you consider yourself prepared for implementing career education?

_____ Adequately prepared
_____ Moderately prepared
_____ Slightly prepared
_____ Not prepared

10. Based on your understanding of the concept of career education, how much would you say you agree with the goals and objectives of career education?

_____ Strongly agree with the goals
_____ Agree with the goals
_____ Disagree with the goals
_____ Strongly disagree with the goals
_____ Have no understanding of the goals

11. How would you rate the general level of staff morale (or "esprit de corps") of the professional staff in your school?

_____ Very high morale among most of the staff
_____ High morale among most of the staff
_____ Mixed--some high morale, some low
_____ Low morale among most of the staff
_____ Very low morale among most of the staff

12. How frequently do faculty meetings concerned with career education take place in your school?

_____ At least once a week
_____ Two or three times a month
_____ Once a month
_____ Less than once a month
_____ Never
_____ Does not apply

13. Please indicate the type of career education staff development you have received. (Check as many as apply to the types of training you have had.)

_____ Career education concepts
_____ Teaching techniques in career education
_____ Curriculum materials for career education
_____ Career guidance/counseling techniques
_____ Evaluation techniques for career education
_____ Using community resources
_____ Involving parents
_____ Other _____
(Write in)

14. Now, go back and asterisk (*) any area in which you feel a need for further staff development.

15. How many hours, in total, have you participated in career education staff development activities?

_____ 0
_____ 1 - 12
_____ 25 - 36
_____ 37 - 50
_____ 50 - 100
_____ Over 100

Part 2: ACTIVITIES SECTION

For each of the activities listed below, please mark three responses, indicating (1) how frequently you conduct or participate in the activity; (2) at this point in your implementation (or for your role), do you feel that you should be doing this activity about the same amount as you indicated in one, should you really be doing it more, or might you now do it less; and, (3) the importance you place on the activity. Circle your response in all three columns. Refer to the choices presented above each column.

1. Frequency	2. Optimum Frequency	ACTIVITIES	3. Importance to Program
a. almost every day b. once a week c. once or twice a month d. less than once a month e. never f. does not apply to my role in this school	1. less s. same amount m. more		1. low importance 2. of some importance 3. important 4. highly important
a b c d e f	1 s m	1. Present the relationship between basic subject skills (such as math, reading, etc.) and particular careers.	1 2 3 4
a b c d e f	1 s m	2. Have students participate in follow-up discussion after career education field trips.	1 2 3 4
a b c d e f	1 s m	3. Take part in developing career education curriculum units and materials for myself or others.	1 2 3 4
a b c d e f	1 s m	4. Team with guidance/counseling personnel to present career-oriented activities in the classroom.	1 2 3 4
a b c d e f	1 s m	5. Have students participate in simulated work experiences in the school.	1 2 3 4
a b c d e f	1 s m	6. Have other school staff present information about their specific career skills to the students.	1 2 3 4
a b c d e f	1 s m	7. Use parents to present career related information to the students.	1 2 3 4
a b c d e f	1 s m	8. Have people (other than parents) from business, labor or industry present information about careers to the students.	1 2 3 4
a b c d e f	1 s m	9. Advise individual students about career possibilities.	1 2 3 4
a b c d e f	1 s m	10. Team with other staff members or teachers to present career-oriented activities to students.	1 2 3 4
a b c d e f	1 s m	11. Have students participate in career related group guidance sessions.	1 2 3 4
a b c d e f	1 s m	12. Assist students in how to make career decisions.	1 2 3 4

1. Frequency	2. Optimum Frequency	ACTIVITIES	3. Importance to Program
a. almost every day b. once a week c. once or twice a month d. less than once a month e. never f. does not apply to my role in this school	1. less s. same amount m. more		1. low importance 2. of some importance 3. important 4. highly important
a b c d e f	1 s m	13. Have students learn job getting and job seeking skills such as how to fill out an application form, how to prepare a resume, and how to behave on a job interview.	1 2 3 4
a b c d e f	1 s m	14. Have students go on field trips to businesses or industries.	1 2 3 4
a b c d e f	1 s m	15. Assess student knowledge of the world of work through self-made or commercial tests.	1 2 3 4
a b c d e f	1 s m	16. Have students engage in activities aimed at reducing sex and race stereotyping in their career choices.	1 2 3 4
a b c d e f	1 s m	17. Have students participate in shadowing (following and observing workers) activities.	1 2 3 4
a b c d e f	1 s m	18. Have students study the relationships among interests and abilities and various careers.	1 2 3 4
a b c d e f	1 s m	19. Actively assist in the occupational placement of school leavers.	1 2 3 4
a b c d e f	1 s m	20. Have students use TV, tape, filmstrips or radio to learn about occupations.	1 2 3 4
a b c d e f	1 s m	21. Assist students in clarifying their values related work.	1 2 3 4
a b c d e f	1 s m	22. Have students take home materials related to career options and opportunities for them and their parents to work on together.	1 2 3 4
a b c d e f	1 s m	23. Give career related interest and/or aptitude inventories to students.	1 2 3 4
a b c d e f	1 s m	24. Use people in the business, labor, and industry community to assist in part-time and full-time job placement programs.	1 2 3 4
a b c d e f	1 s m	25. Conduct systematic follow-up studies of former students to determine how well the school helped them learn about and prepare for work.	1 2 3 4
a b c d e f	1 s m	26. Have time to learn about and plan for career education.	1 2 3

Part 3: OPINION SECTION

Please indicate your response to each of the following statements by circling the number corresponding to your opinion, using the scale below.

1. Strongly Disagree
2. Disagree
3. Agree
4. Strongly Agree

Strongly Disagree	Disagree	Agree	Strongly Agree		
1	2	3	4	1.	Too many of our students leave our schools lacking the work habits necessary for making a successful transition from school to work.
1	2	3	4	2.	It is not an appropriate role of our school to ask the home and family to provide career-oriented activities for their children.
1	2	3	4	3.	Training in career education should be required for certification of education personnel.
1	2	3	4	4.	Classroom teachers have a responsibility to help students gain an appreciation of the value and importance of work.
1	2	3	4	5.	Elementary school is too early for students to start thinking about career possibilities.
1	2	3	4	6.	Active participation in a career education program will enhance a teacher's overall teaching effectiveness.
1	2	3	4	7.	The relationships between education and work can be most meaningfully taught as a separate course.
1	2	3	4	8.	A career education program does not change the role of the counselor.
1	2	3	4	9.	Career education will have little effect on the career aspirations of students compared with the effect of their socio-economic status.
1	2	3	4	10.	Accomplishment through a paid occupation is necessary in order to gain in personal understanding and have a positive self-concept.
1	2	3	4	11.	Acquainting minority and female students with occupations not traditionally held by members of their sex or race is an important outcome of career education.
1	2	3	4	12.	Business and labor representatives should advise educators about school programs, but it is not appropriate for these lay persons to participate in joint decisionmaking with educators.

1. Frequency

a. almost every day
b. once a week
c. once or twice a month
d. less than once a month
e. never
f. does not apply to my role in this school

2. Optimum Frequency

1. less
2. same amount
3. more

ACTIVITIES

3. Importance to Program

1. low importance
2. of some importance
3. important
4. highly important

a	b	c	d	e	f	. . . .	1	s	m	. . .	27.	Help place students in part-time work (paid or unpaid) while they are still in school or during vacation periods.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	28.	Speak to parents and other community groups about the importance of career education.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	29.	Develop a list of community members who could be used as career education resource persons in the classroom.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	30.	Communicate the school's career education program to parents and the business-labor-industry community.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	31.	Serve as an instructor in career education inservice training for school staff.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	32.	Help academic and vocational teachers in the school meet to identify ways they can cooperate in the career education program.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	33.	Interpret career education evaluation data to others in the school.	. . . .	1	2	3	4

34-40. FOR PRINCIPALS AND COUNSELORS ONLY--OTHERS CONTINUE WITH PART 3

a	b	c	d	e	f	. . . .	1	s	m	. . .	34.	Distribute career-oriented materials to teachers for use with their students.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	35.	Devise career-oriented learning activities and communicate these to teachers.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	36.	Develop, or obtain from other sources, career education evaluation instruments.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	37.	Operate a career resource center for students.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	38.	Provide follow-through and/or job adjustment help to school leavers.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	39.	Complete a school-wide career education needs assessment.	. . . .	1	2	3	4
a	b	c	d	e	f	. . . .	1	s	m	. . .	40.	Team with teachers to present career-oriented activities in the classroom.	. . . .	1	2	3	4

CONTINUE WITH PART 3

Strongly Disagree	Disagree	Agree	Strongly Agree		
1	2	3	4	13.	It does not take a lot of money to begin implementing career education.
1	2	3	4	14.	It is hard to be happy if one cannot find meaning in the work that one does.
1	2	3	4	15.	As part of the school program, students should be involved in a variety of work experiences in the community.
1	2	3	4	16.	Schools without career education do an adequate job of preparing students for careers.
1	2	3	4	17.	An effective program of career education will result in more realistic career aspirations for students.
1	2	3	4	18.	Infusing career education into the curriculum enhances student interest in learning.
1	2	3	4	19.	An active career education program will detract from learning basic academic skills.
1	2	3	4	20.	Our career education program has improved student attendance rates.
1	2	3	4	21.	Career education fosters premature career decisions.
1	2	3	4	22.	Schools should not be responsible for teaching students how to write a resume, how to conduct oneself in an employment interview and other job getting skills.
1	2	3	4	23.	Career education is more important for the non-college bound student than for the college bound.
1	2	3	4	24.	Few business people in this community have the time and the interest to give career-related presentations to school classes.
1	2	3	4	25.	In the past, most students have made appropriate educational and career decisions without career education.
1	2	3	4	26.	To infuse career education into the curriculum would foster the achievement of other instructional objectives.
1	2	3	4	27.	A college degree is no longer a pre-requisite for occupational success.
1	2	3	4	28.	The career of most people begins with their first paid job and ends upon retirement.

Strongly Disagree	Disagree	Agree	Strongly Agree		
1	2	3	4	29.	Career education cannot be done effectively without the addition of new courses and new facilities to the present educational program.
1	2	3	4	30.	Helping female students consider traditionally male careers is a proper role for parents but not the schools.
1	2	3	4	31.	Work experience should be possible for all students not just for those in vocational programs.
1	2	3	4	32.	It is important to prepare people for the unpaid work, as well as the paid work, that they will do.
1	2	3	4	33.	Parents are good career education resource persons to use in the classrooms.
1	2	3	4	34.	Career education is asking teachers to take on the role of the counselor.
1	2	3	4	35.	Career education should be an integral part of the curriculum for all students from kindergarten through grade 12.
1	2	3	4	36.	Career education is really quite different from vocational education.
1	2	3	4	37.	Without an effective career education program most students, upon graduation, would lack the decisionmaking skills necessary for adapting in today's rapidly changing world.
1	2	3	4	38.	One of the responsibilities of the schools is job placement for all students who desire to work.
1	2	3	4	39.	Career education is just a fad.
1	2	3	4	40.	"Work" and "job" really mean the same thing.

41. Rate how effective your school's program is in achieving the following objectives. (Rate each item by choosing the appropriate response from the categories listed below and write the letter corresponding to your choice on the line provided.)

a. Not Effective
b. Slightly Effective
c. Moderately Effective
d. Very Effective
e. Not applicable for students in this school

Our school develops students who are:

____ a. Competent in the basic academic skills.

____ b. Equipped with good work habits.

____ c. Capable of choosing a personally meaningful set of work values.

____ d. Equipped with career decisionmaking skills, job hunting skills, and job getting skills.

____ e. Equipped with job specific occupational skills and interpersonal skills at a level that will allow them to gain entry into and attain success in the occupational society.

____ f. Equipped with career decisions based on the widest possible set of data concerning themselves and their educational-vocational opportunities.

____ g. Aware of means available to them for continuing and adult education once they have left the formal system of schooling.

____ h. Successful in being placed in a paid occupation or in further education.

____ i. Successful in understanding the relationship between one's work and one's life style.

42. Ignoring restraints such as level of funding, please tell us what changes you would want to see instituted to improve your career education program. (Write in your answer on the back of this sheet.)

(IF THERE ARE NO ADDITIONAL QUESTIONS PROVIDED FOR YOUR SCHOOL SYSTEM, YOU HAVE COMPLETED THIS QUESTIONNAIRE. THANK YOU VERY MUCH FOR YOUR COOPERATION.)